MARYLAND & RARE BOOK ROOM
UNIVERSITY OF MARYLAND LIBRARY
COLLEGE PARK, MD.

LIBRARY
UNIVERSITY OF MARYLAND
COLLEGE PARK, MD.

DO NOT CIRCULATE

Baltimore. Mayor.

ANNUAL REPORT

OF THE

CITY COMMISSIONER

TO THE

Mayor and City Council of Baltimore,

FOR THE

FISCAL YEAR ENDING DECEMBER 31, 1883.

LIBRARY
UNIVERSITY OF MARYLAND
COLLEGE PARK, MD

Maryland
JS
584
.A1B3
1883
pt. 2

Digitized by the Internet Archive
in 2011 with funding from
LYRASIS Members and Sloan Foundation

http://www.archive.org/details/mayorsmessage18832balt

REPORT.

CITY COMMISSIONER'S OFFICE—CITY HALL.

BALTIMORE, January 1, 1884.

To the Honorable the Mayor
and City Council of Baltimore:

GENTLEMEN:

I respectfully submit in detail the report of the operations of this Department for the year ending December 31st, 1883.

There has been a change in the staff of the office, caused by the death of Mr. Wm. Nicoll, who held the position of Assistant City Commissioner. His death occurred on the 13th day of October, 1883, after eight weeks' illness, and was greatly regretted by all who respect and honor a faithful and honest public servant. His Honor, Mayor Whyte, appointed Mr. Chas. A. Hook, Civil Engineer, to the position thus made vacant. Mr. Hook had for a long time been in the employ of this Department as Engineer of the Harford Run Improvement. His well-known abilities as a civil engineer made his appointment a valuable addition to the working force of the office. But after a service of about five weeks he resigned the position, because of having received from the Water Department

267364

a contract for the completion of Lake Clifton. His Honor, Mayor Latrobe, appointed Mr. Chas P. Kahler to succeed him. Mr. Kahler, who is also an experienced civil engineer, had been for some time an attache of this office. His well-known ability and industry made his appointment desirable for the office, and I have no doubt will be of service to the city.

Before leaving this subject, I desire to return to all the attaches of the office my thanks for the industry, fidelity and intelligence with which they have discharged their various duties.

The report of our faithful clerk, Mr. John E. Toole, will show the amounts appropriated and expended for each piece of work, to which your attention is specially invited.

REPAIRING STREETS.

In improving the streets of the city paved with cobble stones, the policy of repaving instead of repairing has been strictly adhered to, with, I think, good results. In this department there are twelve gangs, six working in the section east of Calvert street, and six in section west of street named. Table D shows the whole amount of repaving done, and materials furnished in the streets and alleys of the city and the amount done on each. From this table it will appear that there has been 2,296,211 square feet of repaving with cobble stones and 25,338½ lineal feet of kerb reset. It will also show that there was 47,231⅓ square feet of Belgian block paving done on Baltimore, Fayette, Light, Lombard, St. Paul, North and other streets. If this is added to the number of square feet of cobble

stone pavement, it will show the amount of repaving to have been 2,352,442⅘ square feet. The amount of material used in this work was 4,855¼ perches of stone and 27,148 loads of sand.

Table E will give the names of superintendents of repair gangs, the amount of work done and quantity of material used by them respectively, amount of money expended by each, average cost of each superintendent's work, without material, and the average cost of it as a whole. There was appropriated by the city for repairs of streets $73,000. By authority of Ordinance No. 169, approved October 10, 1883, there was transferred from the appropriation for repairs of Harford Run sewer to the appropriation for repairs of streets $1,000, making the whole amount applicable to the last-named work $74,000.

There has been expended $73,996.94, as follows:

Pay-rolls of Superintendents, as per table.	$65,485 96
Repairing Belgian block pavements.....	2,073 05
Material and tools of all kinds.....	6,437 93
	$73,996 94

It will be thus seen that the cost to the city for repairing the streets, including Belgian block repairs, is as follows:

Quantity of work done, 2,252,442 square feet.	
Amount appropriated.....	$74,000 00
Amount expended.....	73,996 94
Amount expended for labor, including cost of repairing Belgian block pavement...	67,559 01
Cost of material and tools.....	6,437 93
Average cost per square foot	.03$\frac{2}{1}\frac{8}{0}\frac{5}{0}$

In accordance with recommendation contained in my last annual report, the Mayor and City Council passed an ordinance, as follows:

An Ordinance to regulate the tearing up of the streets, lanes and alleys of the city of Baltimore, and the repaving thereby rendered necessary.

Section 1. Be it enacted and ordained by the Mayor and City Council of Baltimore, that from and after the approval of this ordinance no person or persons, corporation or corporations shall dig up, tear up, or uncover any of the streets, lanes or alleys of this city, or any part thereof, or remove therefrom any of the stones, bricks, blocks, cement, or other material with which the same may be paved in whole or in part, without having first obtained a permit therefor from the City Commissioner approved by the Mayor.

Sec. 2. And be it further enacted and ordained, that no such permit as is provided for in the first section of this ordinance shall be issued or granted at any time, unless the applicant or applicants seeking the same shall apply therefor in writing, and shall, in such application, consent and agree that the regrading and repaving of such portion of any street, lane or alley as may be torn up or otherwise disturbed under such permit, and any and all such other work as may be thereby rendered necessary to restore the said street to a proper condition, shall be done by the City Commissioner at the expense of said applicant.

Sec. 3. And be it further enacted and ordained, that any person violating any of the provisions of this ordinance shall be subject to a fine of twenty dollars

for each day the same shall continue; said fines to be collected as other fines are collected for the violation of city ordinances.

Though this ordinance has been useful to some extent to this department in its efforts to get the streets of the city in fair condition, it cannot be as effective as it should be until the Legislature gives to the city entire control of her streets, and as it is about to convene I would respectfully suggest that an appeal be made to it to pass such a law as will accomplish this result.

BELGIAN BLOCK REPAVING.

In pursuance of Ordinance No. 7, approved February 19, 1883, providing for repaving Block street, between West Falls avenue and the Drawbridge; Ordinance No. 6, approved February 20, 1883, providing for repaving Baltimore street, from east side of Greene street to west side of Gilmor street; Ordinance No. 16, vetoed by his Honor, Mayor Whyte; March 13, 1883, reconsidered and passed, the objection of his Honor, the Mayor, to the contrary notwithstanding, providing for repaving Baltimore street, from Jones' Falls to east side of Broadway; Ordinance No. 57, approved May 5, 1883, providing for repaving Broadway, between Canton avenue and Thames street; Ordinance No. 60, approved May 12, 1883, providing for repaving Baltimore street, from east side of Harrison street to bridge over Jones' Falls; Ordinance No. 52, approved May 5, 1883, providing for repaving Camden street, between Charles and Light street; Ordinance No. 67, approved May 19, 1883, providing for repaving Charles street, from south side of Conway to north side of Madison street;

Ordinance No. 43, approved May 1, 1883, providing for repaving Eutaw street, from south side of Camden to north side of Madison street; Ordinance No. 55, approved May 5, 1883, providing for repaving both sides of Lexington Market, between Eutaw and Pearl streets; Ordinance No. 47, approved May 1, 1883, providing for repaving Lexington street, between Charles and Eutaw streets; Ordinance No. 49, approved May 2, 1883, providing for repaving Madison avenue, between Eutaw street and Boundary avenue, with Belgian blocks, advertisements were inserted in Baltimore, New York, Philadelphia and Richmond papers, inviting bids for furnishing and delivering the Belgian blocks required for the work, and contracts were made with the following parties for the delivery of blocks in the quantities and at the prices named:

March 13, 1883—James Grant, Maryland, 50,000, at $2.00 per square yard.

March 14, 1883—John Keaveny, Maryland, 60,000, at $1.90 per square yard.

March 14, 1883—McClenahan & Bro., Maryland, 150,000, at $1.90 per square yard.

March 16, 1883—Westham Granite Company, Virginia, 250,000, at $1.99 per square yard.

March 17, 1883—John Booth, New York, 100,000, at $1.95 per square yard.

June 11, 1883—Henderson Granite Company, North Carolina, 100,000, at $75 per thousand.

June 13, 1883—John Booth, New York, 100,000, at $77 per thousand.

March 14, 1883—Gill & McMahon, Maryland, 250,000 at $2.00 per square yard.

June 15, 1883—Wm. F. Weller, Maryland, 100,000, at $77 per thousand.

June 16, 1883—Charles Guidet, New York, 250,000, at $76.50 per thousand.

June 18, 1883—A. B. Kellogg, New York, 250,000, at $76 per thousand.

June 25, 1883—Joseph H. West, Maine, 100,000, at $75 per thousand.

June 27, 1883—H. Gore & Co., of Boston, Mass., 100,000, at $75 per thousand.

July 23, 1883—The New York and Maine Granite Paving Block Company, New York, 500,000, as follows: 100,000 at $44.75; 100,000 at $46.25, 100,000 at $47.00; 100,000 at $47.50, and 100,000 at $48.00 per thousand.

A contract was also made with The Bigelow Blue Stone Company of New York to furnish gutter-stones to be used in the above work, as follows: 50,000 linear feet of North River Blue Stone Gutter Stones, as may be required by the City Commissioner, to be delivered at such times and at such places as may be designated by the said City Commissioner, at 28⅝ cents per linear foot.

The contract for furnishing new six-inch kerbstones and circles was awarded to W. F. Weller, of Maryland, at 97 cents per linear foot for the former, and $1.94 per linear foot for the latter.

The work of repaving with Belgian blocks was commenced and pursued as follows:

The repaving of Block street, between West Falls

avenue and Drawbridge, was begun March 1, 1883, and completed March 21, 1883.

West Baltimore street, from Greene to Gilmor street, was begun March 26, 1883, and completed July 12, 1883. East Baltimore street, from Harrison street to the bridge over Jones' Falls, was begun April 25, 1883, and completed May 9, 1883. East Baltimore street, from bridge over Jones' Falls to Broadway, was begun May 10, 1883, and completed July 21, 1883.

Eutaw street, from Camden to Madison street, was begun July 17, 1883, and completed October 17, 1883. Broadway, from Canton avenue to Thames street, was begun July 19, 1883, and completed September 5, 1883. Camden street, from Light to Charles, was begun September 17, 1883, and completed September 27, 1883. Charles street, from Conway to Madison, was begun September 27, 1883, and completed to Centre street, and from Centre to Monument street, on one side of Mount Vernon Place Square, when we were compelled to suspend work by reason of the severity of the weather.

Lexington Market, on both sides, from Eutaw to Pearl street, was begun November 5, 1883, and was completed, except the intersection of Pearl street, which we were likewise forced to discontinue for the same cause as in the case of Charles street.

The streets authorized to be repaved with Belgian blocks, which were not commenced last year, are as follows:

Lexington street, from the west side of Charles street to the east side of Eutaw street, Ordinance No.

47, May 1, 1883. Madison avenue, between Eutaw street and Boundary avenue, Ordinance No. 49, May 2, 1883.

The Mayor and City Council having determined that the repaving of the streets with Belgian blocks should be done by this department by day's labor, it is deemed proper to submit a statement showing the cost of each street repaved under this system. The cost will be given in detail as far as it will be possible to do so. In case of some of the streets repaved this cannot now be done because the plats of the same are yet in the hands of the City Surveyor.

The repaving of Howard street from Lombard to Centre street, a distance of 3,175 feet, was commenced on the 8th of June and completed September 11, 1882.

The cost of the work done on Howard street, including all labor, material, &c., is as follows:

Total cost		$49,145 80
Less collections		441 75
		$48,704 05
Charges:		
City's third	$12,094 30	
Property holders, general	23,829 15	
" " special	359 46	
Cross streets	12,421 14	
Total amount of paving warrant		$48,704 05
Cost of paving per square yard		2.62\frac{088}{1000}$
Cost to property holders per front foot		4.64\frac{523}{1000}$

Total number of blocks used	421,219
" square yards of paving	17,301
" feet of gutter stone	5,454
" feet of new kerbstone	475
" new kerb circles	12
" square feet flagging	2,848

The repaving of Charles street, from Chase street to North avenue, a distance of 3,152 feet, was commenced September 14, 1882, and completed December 6, 1882.

The cost of the work done on Charles street, including all labor, material, etc., is as follows:

Total cost	$38,449 45
Less collections	971 95
	$37,447 50

Charges:

City's third	$10,542 95
Property holders, general	18,570 51
" " special	2,515 38
Paving warrant	$31,628 84
Cross streets	5,848 66
Total amount of paving warrant	$37,447 50

Cost of paving per square yard ..... 2.58\frac{81}{100}$

Cost to property-holders per front foot .... 3.74\frac{216833}{1000000}$

Total number of blocks used	306,709
" " " square yards of paving in front of property	10,763
Total number of feet of gutter stone	5,211
" " " " " new kerbstones	4,354
" " " " " new kerb circles	83
" " " square feet of flagging	615
" " " square yards, including cross streets	12,560

The paving at intersection of North and Maryland avenues, done in 1882, was done at the expense of the city.

The cost of the work, including new flagstones, and the adjustment of the adjacent cobble stone pavements, amounted to $1,699.03.

Number of square yards of paving	591
Number of Belgian blocks used	14,857

The repaving of Block street, between West Falls avenue and the Drawbridge, a distance of 593 feet, was begun March 1, 1883, and completed March 21, 1883.

Total cost	$6,336 12

Whole cost borne by the city.

Total number square yards of paving	$2,423\frac{8}{10}$
" " of blocks used	59,740
" " " feet of gutter stone	1,120
" " " new kerbstones	48 ft. $8\frac{1}{2}$ in.
Cost per square yard	$\$2.56\frac{2}{3}$

The repaving of Baltimore street, from Greene to Gilmor streets, a distance of 5,348 ft. 9 in., was commenced March 26, 1883, and completed July 12, 1883.

Total cost, including kerbing, flagging, and gutter stones.....	$73,907 07
Total number of square yards of paving.....	24,305½
" " " blocks used.....	594,274

The repaving of Baltimore street from Harrison street to the bridge over Jones' Falls, a distance of 218 feet 5 inches, was commenced April 25, 1883, and completed May 9, 1883.

The cost of this repaving is included in the cost of repaving West Baltimore street, and will be separated when the paving warrant is made up from the plats now in the hands of the City Surveyor.

The repaving of Baltimore street from the bridge over Jones' Falls to Broadway, a distance of 3,509 feet, was commenced May 10, 1883, and completed July 21, 1883.

Total cost, including kerbing, flagging and gutter stones.....	$45,617 38
Total number of square yards of paving....	15,035 $\frac{39}{100}$
" " blocks used.....	381,924

The repaving of Eutaw street from Camden to Madison street, a distance of 4,973 feet, was commenced July 17, 1883, and completed October 17, 1883.

Total cost, including kerbing, flagging and gutter stones.....	$69,813 26
Total number of blocks used.....	623,601

Approximate number of square yards of paving, 24,000, the final estimate of quantities not being completed.

The repaving of Broadway, from Canton avenue to Thames street, a distance of 986 feet, was commenced July 19, 1883, and completed September 5, 1883.

Total cost, including kerbing, flagging and gutter-stone	$22,977 98
Total number of sq. yds. of paving	8,387 $\frac{77}{100}$
" " blocks used	214,547
" " feet of gutter-stones	3765 ft. 5½ in.
" " new kerbstones	1786 ft. 9 in.
" " " flagging	140 ft. 1 in.

The repaving of Camden street, from Light to Charles street, a distance of 421 feet, 2 inches, was commenced September 17, 1883, and completed September 27, 1883.

Total cost, including kerbing, flagging and gutter-stones	$4,750 50
Total number of square yards of paving	1811 $\frac{3}{10}$
" " blocks used	45,110

The repaving of Lexington Market, from Eutaw to Pearl street, was commenced November 5, 1883, and work suspended thereon, also on account of the weather, December 22, 1883.

Its cost, as far as the work progressed, is.. $16,054 20

The repaving of Charles street, from Conway to Madison, was commenced September 27, 1883, and

work suspended thereon also on account of the weather, December 19, 1883.

Its cost, as far as the work progressed, is.. $44,437 24

In the prosecution of the aforegoing works many great improvements were made in the grades and alignments of the kerbs by reducing the irregularities which had previously existed therein. At all important intersections of cross streets, surface sewers, or gutters covered with iron plates, were constructed, and the flagstone crossings renewed or thoroughly repaired. The adjustment of the kerb lines and grades compelled the regrading and repaving of the sidewalks, and the putting in good shape and condition of footways which had previously been, at many points, irregular, and even unsafe. Where these works came in contact with inlets to sewers, the same were put in thorough and suitable order.

An account in detail will be furnished of each street paved with Belgian blocks as fast as it can be made from the paving plats of the City Surveyor. My thanks are due to Messrs. James R. Carroll, W. C. Thomas and J. T. Bishop for their faithful superintendence of these works.

ASPHALT REPAVING.

Repaving Eutaw Place.

In accordance with Ordinance No. 52, approved May 2, 1882, providing for repaving with asphalt blocks Eutaw Place or streets between Dolphin and Laurens streets, and between Laurens street and North avenue, a contract was entered into between the Mayor and

City Council and the Maryland Pavement Company, for the performance of this work by said company. The portion of the same between Laurens street and North avenue was completed January 4, 1883. The portion between Dolphin and Laurens streets was begun April 10, 1883, and completed July 26, 1883.

The cost of this work is $2.50 per square yard, one-half of which is paid by the city, and one-half by the property-holders.

Cost of repaving Eutaw Place from Laurens to Dolphin streets:

Repaving	$30,891 11
Less old stone sold	480 55
	$30,410 56
Surveyor	60 00
Commissions	914 11
	$31,384 67
City's proportion	$15,692 33
Property-holders' proportion	15,692 34
	$31,384 67

Cost of repaving Eutaw Place from Laurens street to North avenue:

Paving 6,552⅔ square yards at $2.50	$16,380 55
Kerbing 2,116½ feet at $1.10	2,328 06
	$18,708 61
Surveyor	134 00
Commissions	565 28
	$19,407 89

Charged to city:

Paving	$8,190 28
Kerbing, fees and commissions	2,691 84
	$10,882 12
Property-holders	8,525 77
	$19,407 89

Repaving Calhoun Street from Harlem Avenue to Edmondson Avenue.

In pursuance of Ordinance No. 79, approved May 18, 1882, providing for the repaving of Calhoun street, between Harlem avenue and Edmondson avenue, with the asphalt blocks of the Maryland Pavement Company, a contract was entered into between the Mayor and City Council and the said Maryland Pavement Company, March 2, 1883, for the performance of said work. The work was begun on the 22d day of March, 1883, and completed on the 13th day of April, 1883. The cost of this work is $2.50 per square yard, one-half of which is paid by the city and one-half by the property holders.

Cost of work:

Repaving 1,945 square yards, at $2.50	$4,862 50
Kerbing $456\frac{9}{12}$ feet, at $1.10	502 46
	$5,364 96
Charged to city	$2,682 48
Property-holders	2,682 48
	$5,364 96

On the 13th day of August last the proprietors of a majority of the feet of ground binding and fronting on Cathedral street, between Monument and Madison streets, made application to have all that part of said street repaved with the compressed asphalt blocks of the Maryland Pavement Company, the same to be done under the direction of this department, and agreeably to the acts of assembly and ordinances of the Mayor and City Council in such cases made and provided. On the 15th day of October, 1883, the Maryland Pavement Company submitted a proposal to do this work to the Mayor, Comptroller and Register. The same was accepted, and the work will be begun early in the spring.

Repaving Marsh Market Space.

In pursuance of Ordinance No. 46, approved May 1, 1883, providing for repaving Marsh Market Space, between Baltimore and Pratt streets, with concrete or spread asphalt, a contract for the same was made with Messrs. Cranford and Filbert July 12, 1883, at $2.75 per square yard. The work was begun on the 17th day of September, and completed and accepted on the 17th day of November, the same being done under the superintendence of Charles H. Latrobe, Esq., civil engineer, whose report of the progress, character and cost of this work is as follows:

BALTIMORE, December 31st, 1883.

Thos. S. Wilkinson, Esq.,
City Commissioner:

DEAR SIR:

Having been, on September 15th, 1883, placed in charge, by you, of the relaying of Marsh Market Space with sheet asphalt, under a contract between H.

L. Cranford & Co., of Washington, D. C., and the Mayor and City Council of Baltimore, I beg leave to report that on September 17th the preliminary levels were taken, and on September 18th the contractors began tearing up the cobbles at Pratt street, on the east side of the market house. On the 20th grading and kerb setting began, and progressed until October 2d, when the steam roller arrived. On Tuesday, October 9th, the laying of the hydraulic concrete base began, and was completed on the east side October 18th. On October 25th the contractors began laying the asphalt, and finished the east side ready for traffic by November 3d. The removal of cobbles and grading for the hydraulic base began on the west side October 18th, and everything was completed ready for traffic on November 17th. The regular process pursued by the contractor, according to specifications, was to remove the old cobbles and grade the bed of the street in accordance with the engineer's levels. It was then rolled thoroughly with a twelve-ton steam roller, all soft spots being cut out and refilled. The hydraulic concrete bed was then laid, and eight days thereafter, to admit of the thorough settling of the concrete, the asphalt was laid and the work finished up. The length of time consumed in doing the work was about two months, but the contractors were much interfered with by bad weather, and the market days also caused much delay. I found it necessary to make considerable changes in grade and alignment, which were made without injury, and indeed to the advantage of the drainage. The gutters were all laid in Port stone, with granite block toothing, which is far better than forming the gutters in the asphalt, which is injured by standing water. The system of gutters at the inter-

section of Second street was much improved and completely reconstructed in brick and cement, and covered with iron plates. The intersection of Lombard street was not touched, as we agreed it would be best, in view of the double car tracks at that point, to use granite blocks entirely. The work was thoroughly inspected during its progress, and was faithfully done. Toward the last the weather was rather cold, and there are a few defects in surfacing, due to sudden changes of temperature, which stiffened the mixture before it was brought accurately to shape; but as the pavement is guaranteed under bond for five (5) years, and the works are now located in Baltimore, any defects which may appear can be easily remedied next summer. The grading of the earth surface for the reception of the concrete base revealed a solid, compact, gravelly soil, upon which the steam roller did not make much impression, from one to two inches being the usual amount of consolidation. In future contracts for asphalt I would suggest that it be required to be laid between the dates of May 1st and October 31st, and never at a temperature less than 50° Fahrenheit. The measurement and cost of the work is submitted below:

Statement of cost of work in laying sheet Asphalt Pavement at Marsh Market Space.

Whole cost of work to date.....	$23,643 47
Analyzed as follows:	
Number of square yards, 7,335 $\frac{64}{100}$, at $2.75.	20,173 01
New gutter-stones, kerbing, flags, setting and resetting same.....	2,199 57
New brick gutters at Second street and Marsh Market Space, including new iron gutter-plates	1,270 89
	$23,643 47

In conclusion, I would state that the granite blocks to be used in repaving intersection of Lombard street are on the ground, and the street will be finished as soon as the weather will permit.

The change of grade in places on this work has made it necessary to relay the brick pavement in that part of the market between Lombard and Second streets. This matter was first thought to be in the department of the Inspector of Buildings, and he made a contract with Mr. John B. Wellener to do this work, but after consultation with his Honor, the Mayor, he thought it was a proper charge against the work of repaving Marsh Market Space. It was therefore turned over to the City Commissioner's Department.

These two matters will, of course, add to the aggregate cost of the work.

Respectfully submitted,

C. H. LATROBE,
Engineer in Charge.

I would respectfully recommend that the following streets be paved during the coming season with Belgian blocks:

Exchange Place and Lombard street, from South street to the Lombard street bridge; Holliday street, from Lombard to Fayette street; Camden street, from Charles to Howard street; Hanover street, from Baltimore to Camden street; Howard street, from Centre to Richmond street; Belair Market Space; Hanover Market Space; Cross Street Market Space, and such other localities as the City Council may, in their judgment, consider as standing in need of improved pavements.

ESTABLISHMENT AND RE-ESTABLISHMENT OF THE GRADES OF STREETS.

In Article 47, Section 4, of the City Code, power is given to the Mayor and City Council to provide by general ordinance for establishing and changing grade lines as follows:

"Section 4. The Mayor and City Council of Baltimore are hereby authorized and empowered to provide by general ordinance for the establishment of the permanent grade lines of any street, lane, or alley, or part thereof, now or hereafter to be marked, located, or laid out upon the plan of said city, on application of the owner of any property binding thereon, and from time to time, for a change in any such grade lines which may have been previously so established, and for the assessment and collection of the cost of said work, either through the general tax levy or by special assessment upon the party making the application."—City Code, Article 47, page 987. In accordance with the above statute, the Mayor and City Council passed the following general ordinance:

"Section 28. The City Commissioner may, on application in writing of the owner of any property binding thereon, proceed to establish the permanent grade line or lines of any street, lane or alley, or part thereof, now or hereafter to be marked, located, widened or straightened or laid out upon the plan of the city, and may also, from time to time, upon similar application, make such changes in the grades of any unpaved streets, lanes or alleys, or parts thereof, as he may deem advisable. He shall keep in his office a record of

such establishments or changes, and shall also make a written return of the same to the Register of the city, who shall record the same and preserve the original in the files of his office, and shall also collect the cost of such establishments or changes of grade from the person or persons making the application for the same.

"Sec. 29. Before establishing such grade, or altering or changing any grade heretofore, or that may be hereafter established, the City Commissioner shall give five days' notice in three daily papers of the application made, and that he will appear on the premises, on the date to be named in said notice, for the purpose of determining on such application."—City Code, Article 47, pp. 1008, 1009.

It will thus be seen that the only way in which the grade can be established or re-established on any street, lane or alley in the city is by the application in writing of a property-holder on its line to have the grade established. It is then made the duty of the City Commissioner, after giving five days' notice in three daily papers, to make the proper establishment. The property-holder having the right to appeal to the Mayor, whose duty it is to appoint a commission of five persons to review the grade as fixed by the City Commissioner, upon the person or persons giving a bond to the Mayor and City Council and filing it with the Register for all expenses growing out of said appeal.

The experience of the last two years has led me to the conclusion that it is impossible for any officer to properly establish the grade lines in this manner; and also that in what is, in my judgment, one of the most

important subjects that the Mayor and City Council have to deal with, that of fixing the proper grades of her streets, it is too much power to give to any officer, no matter how conscientious he may be in the discharge of his duties, and would respectfully suggest that some steps be taken looking to the appointment of a commission of engineers, the City Commissioner being a member, whose duty it shall be to have the proper surveys made and plats prepared for the purpose of establishing the grades of all streets, lanes and alleys in the city not established heretofore, with a view to a comprehensive plan for the future development of the streets of the city. And also that provision should be made for a full hearing by said commission of the complaints of property owners interested in such establishments.

GRADES ESTABLISHED IN 1883.

Eagle street, between Fulton avenue and Monroe street.

North street, between Eager and Preston streets.

Harlem avenue, between Fulton avenue and Monroe street.

Aliceanna street, from President street to East Falls avenue.

East Falls avenue, from Canton avenue to Aliceanna street.

Johnson street, from Wells street or Ohio avenue to Barney street.

Harris alley, from Hudson to Dillon street.

Luzerne street, between Monument and Madison streets.

Presstman street, from Mount street to Fulton avenue.

Bouldin alley, from Robert to Laurens street.

Stoddard alley, between Wilson and Laurens streets.

Mulberry street, between Gilmor street and Vincent alley.

Ten-foot alley east of Greenmount avenue and running south from Biddle street about 250 feet.

Hargrove alley, between Lanvale and Federal streets.

Barney street, between Byrd and Johnson streets.

Luzerne street, between Monument and McElderry streets.

Mount street, between Mulberry and Franklin streets.

Mulberry street, between Vincent alley and Mount street.

Cathedral street, between Saratoga and Mulberry streets.

The Mayor and City Council, by Ordinance No. 123, approved October 26, 1882, instructed the City Commissioner to change the grade of Preston street, from Calvert street to Jones' Falls, as specified in the ordinance. After being duly advertised according to law, a contract was entered into with J. H. D. Boone & Co. for the work, and it was pushed to completion in the spring of the year. This change of grade made it necessary to regrade, repave and recurb North street from Preston street to the bridge over Jones' Falls. For this work $4,449.44 was appropriated in estimates for the City Commissioner's department for 1883. Its actual cost was $3,983.94, leaving a balance of $465.50.

It has since appeared that in apportioning a voucher of $161.78 that should have been charged to this

account, was charged to the account of the Jones' Falls Improvement. As corrected, it will thus appear:

Appropriation	$4,449 44
Cost of work	4,145 72
Balance	$303 72

The Mayor and City Council, by Ordinance No. 61, approved May 12, 1883, changed the grade of Bond street, as specified in the ordinance, from Hoffman street to North avenue. This street was being graded, paved and kerbed under contract with Jos. G. Loane & Co. By advice of the City Solicitor the cost of this change of grade, which was $2,513.60, was charged to the city's portion of the cost of the improvement.

By Ordinance No. 40, approved April 24, 1883, the City Commissioner was instructed to change the grade, as specified in the ordinance, of Fulton avenue between Patterson avenue and Baker Circle, including Baker Circle and Baker street, between Vincent alley and Baker Circle. After being duly advertised according to law, a contract was entered into with John Lyons & Son for this work. The estimated cost of the work was $7,000, including $686 for the reconstructing of eight inlets. The actual cost has been $6,920.

An appropriation is respectfully asked for its payment. This improvement makes it an absolute necessity to regrade the Liberty road from Fulton avenue as now graded west to the city limits. This is a matter of such importance that your early attention to it is respectfully advised.

SEWERS AND INLETS.

Harford Run Sewer.

This work, which is intended to abate the nuisance of old Harford Run Sewer, by changing its course from under the private property into a close sewer, located in the public streets, in consequence of the failure of the contractors to proceed, was authorized by the Mayor and City Council to be completed by this department. The work was accordingly commenced May 23d, 1882, and placed under the direction of Mr. Charles A. Hook, civil engineer. On the 30th day of August last Mr. Hook submitted a report of the completion of the work, which is here given in full, as showing all the details of this improvement:

BALTIMORE, August 13, 1883.

Mr. Thomas S. Wilkinson,
City Commissioner:

DEAR SIR:

I respectfully submit for your consideration my report on the completion of the work known as Harford Run Sewer. Though previous reports cover a great deal that will herein follow, I consider it proper in the final report to recapitulate the details, hence I will endeavor to give in the following communication every item which I think can be of any interest to you. This work, which is to form an important part in abating the nuisance of the old Harford Run Sewer, was advertised and let to Messrs. Conway & Fahey, contractors, the first part of June, 1881, their prices being as follows:

Excavation, 37 cents per cubic yard.
Rubble stone work, $3.30 per cubic yard.
Brick work, $6.40 per cubic yard.
Flagging, 75 cents per square foot.
Manhole castings, .03 cents per lb.
Iron pipes, $45.00 per ton.
Lumber, $18.00 per M.

They commenced operations June 13, 1881. They worked until the 24th of January, 1882, in which time they completed 1,027 linear feet of the elliptical arch, which was 10′x6′ in the clear. The work was then closed on account of severe winter weather. As soon as the weather opened they were notified to resume operations, but they failed to respond, and after a careful consideration of the proper authorities to act on their neglect to resume work, your department was authorized to proceed and finish the work. Operations were commenced May 23d, 1882. Contracts were entered into for the different materials at the following prices:

Daniel Donnelly contracted for bricks at $8.00 per thousand; James H. Atkinson contracted for rubble stone at $1.95 per cubic yard; Messrs. Russell & Giese contracted for hydraulic cement at $1.28 per barrel, allowing 8 cents for all empty barrels returned; James Oswald contracted for sand for the whole work at 45 cents per load.

Upon this basis the work was started, doing the balance of the work by day's labor, etc. But I soon discovered that the cart boys were loafing on the long hauls, and, after consultation with you, we concluded to contract for the hauling away of the dirt at so much

per cubic yard. Three different parties were invited to bid. Mr. C. M. Hope being considerably the lowest, the work was awarded to him at 26 cents per cubic yard. Again, after carefully noting the expenses incurred by employing bricklayers by the day, it was considered economy to contract for the laying of bricks by the thousand, which was done with Messrs. Hammond and Morgan for $2.25 per thousand. The work then progressed satisfactorily upon this basis.

The sewer was built by contractors (commencing at Holland and Canal streets) to a point on Eden street, near Jefferson street. It was at this point where we commenced operations. From this time (23d May, 1882,) the work was driven with as much speed as possible, and, with the exception of connections and inlets, the work was finished the first of January, 1883. These connections, from necessity, were very tedious, as we had all the time to contend with the water from the old sewer. The new sewer enters the old sewer at Holland and Canal streets. As two outlets were necessary at this point, one for the new sewer, the other to convey a large quantity of water from the old sewer on its original course, the plan adopted was to bring the 6′x10′ sewer around on its regular curve into the old sewer, until the east side of the new sewer cut the inside edge of the old sewer, and then stop; this left space enough to build a five-foot circle opposite to it, which runs in the course of the old sewer a distance of 20 feet, with bulkheads at both ends. As they stand, one arch supports the other, and so far, I am glad to say, the plan has acted satisfactorily. The next connection was the crossing of the old sewer on Eden street, between Jefferson and McElderry streets.

At this point considerable trouble was encountered in getting the new sewer through the old one, it being necessary, for the protection of the new work, to keep the water of the old run in its original course. As you are aware, I had to build a water-shoot over the new work, which stood until we turned the principal water from the old sewer into the new one. The arch of the new sewer was then completed and a three-foot circular arch left to convey the water from the old sewer into it. Finding, on a very heavy rain, that the inlet at this point was hardly sufficient, I constructed a rectangular opening over the top of the new sewer on the course of the old run, so that in the case of a very heavy flood the water backed above the mouth of the inlet would find its way through this opening and run on the original course. This was only done as a temporary necessity until the water of the old sewer be entirely diverted, when they can be filled up.

The next connection was made at Madison and Caroline streets, where the course of the new sewer encountered about one-third of the old sewer for a distance of one hundred feet; with careful working (although we were at every disadvantage) we managed to get our connections made without any serious troubles. The next connection was at Chew and Dallas streets, where we crossed the old sewer at right angles; and the next was the final connection at Bond and Abbott streets. At the intersection of these sewers, in every case, there is an opening left from the old sewer into the new one to take the constant drainage which accumulates from private property along the old run, but after that drainage is turned into the streets these inlets should

all be bricked up. Seven new trapped inlets have been put in at the following places: One on the southeast and one on the northeast corners of McElderry and Eden streets, openings 14 feet long by about 13 inches high, and with a 2-foot circular arch leading to sewer. One on the northeast and one on the northwest corners of Eden and Monument streets, openings 14 feet long by 13 inches high, with a 2-foot circular arch connecting with sewer. One on the northeast corner of Madison and Eden streets, opening 14 feet long by 13 inches high, with a 2-foot circular arch connecting with sewer. One on the southwest corner of Caroline and Chew streets, opening 17 feet long by 13 inches high, with 2-foot circular arch connecting with sewer. One on the northeast corner of Caroline and Chew streets, opening 17 feet long by 13 inches high, with 2-foot circular arch leading into sewer. This includes all the new inlets built, but there are connected with the new sewer several old inlets which previously entered the old sewer. There is one on the northwest corner of Caroline and Madison streets; one on the northeast corner of Caroline and Madison streets; and one on the southeast corner of Bond and Abbott streets. There are inserted for ventilation nine manholes, 2 feet in the clear. Iron castings were made to fit the centres, and brick work built to the surface of the street; the brick work capped with iron castings, and the castings perforated with holes an inch in diameter. In the construction of the above work, I had openings left for other inlets, which, from the nature of the ground, cannot be built until the old run is entirely diverted from under the private property. These openings have been temporarily bricked

up with a four-inch brick wall to prevent the rats, which abound in numbers in the sewer, from burrowing behind the masonry, and in time possibly doing damage. The entire length of this sewer measures 3,650½ feet. Of this there was built by Messrs. Conway and Fahey 1,027 linear feet of the 10′x6′ elliptical arch, which left 2,623½ feet for the city to build. Of this there were 946 feet of the elliptical arch 10′x6′, and 1,677½ feet of the circular arch 6′—6″ in diameter.

Before the work was commenced, you requested of me an estimate that would finish the work. As this was the first piece of work of this description that had been done by day's work, I was almost afraid to venture an estimate, but being assured by you that the work should be done strictly upon business principles, I made my estimate, which was $51,901.

The work has all been finished, and the total cost was $46,135.22, leaving a balance of $5,765.78. This includes the cost of main sewer with inlets, also salaries and contingencies, excepting the reconstruction of that portion of sewer which was damaged by explosion of gas. This explosion, which occurred on April 4th, 1883, was undoubtedly caused by gas escaping from the gas mains in the streets, and ignited by a thoughtless boy through a man-hole in sewer, completely tearing out about 150 feet of the sewer and damaging 192 feet so badly that it had all to be taken out and rebuilt from the spring line up. About one-half of the old bricks were cleaned and used over in the outside course. The saddest thing in connection with this was the burying of two little boys in the

debris, but it was almost a miracle that there was not a much greater destruction of human life. The cost of rebuilding this part of the sewer was $1,780.63.

In concluding my report, allow me to thank you for the confidence which you have placed in my management of this work, and the thorough business-like manner in which you have decided all questions pertaining to it. And I can say, without hesitation, had I been employed by a close business corporation, I could not have done work of the same quality for any less money.

Respectfully yours,

CHAS. A. HOOK,
Engineer in Charge.

Before leaving this subject, I desire to call the especial attention of the Council to the concluding portion of the report of Mr. Chas. A. Hook, Engineer of the Harford Run Improvement, made to this department last year. It is a matter of much importance, and one to which I would respectfully advise careful consideration be given. Speaking of the old run he said:

"I have examined into its condition and found it to be an open receptacle for every filthy thing imaginable. Its course is partly under houses, kitchens, back yards, stables and water closets. Some places it is arched over, but principally an open sewer with side walls to support the back yards of property through which it passes. My idea as to the most economical and permanent plan of improvement is as follows:

"Commencing at Orleans and Canal streets where the old run emerges from under private property, and build a close sewer as far as Jefferson street, with a capacity of not less than a four foot circle. Over the top of this sewer, or as near to it as practicable, pave an alley, so graded that it would take the drainage of the adjoining property to inlets leading to the new sewer. I suggest the sewer particularly at this point as a relief to the new sewer. The balance of the old sewer, that is, from Eden to Bond streets, can be filled up, and alleys paved near the old sewer as practicable, with inlets opening into these alleys leading to the new sewer. Before the time arrives to do this work, I hope to be able to make an accurate survey, and definitely locate the old run, showing the whole matter up in a clear and concise manner."

This survey has since been made, and is at the service of the Council.

COMPLETION OF SEWER ON CENTRAL AVENUE BETWEEN EASTERN AVENUE AND BANK STREET.

This work was authorized by Resolution No. 5 of the Mayor and City Council, approved November 23, 1882. The sum of $8,628.50 was appropriated for this work. This work was also placed in charge of Mr. Chas. A. Hook, and is fully described in his report, which is as follows:

BALTIMORE, September 11, 1883.

Mr. Thomas S. Wilkinson,
City Commissioner:

DEAR SIR:

I respectfully submit for your consideration my report on the completion of the sewer on Central ave-

nue known as repairs to Harford Run Sewer, between Eastern avenue and Bank street. At your request I made an estimate of the cost to rebuild 250 feet of the old Harford Run Sewer, commencing where the brick arch stops on the north side of Eastern avenue and continuing the same northerly on Central avenue, a distance of 250 feet. The work was commenced on the 19th of March, 1883. Contracts were entered into as follows:

Mr. Daniel Donnelly for the furnishing of bricks at $8.00 per thousand.

Messrs. Russell & Giese for cement at $1.28 per barrel, allowing 8 cents for empty barrels.

Mr. John Harris for skew-back stone at $1.90 per linear foot.

Mr. James Oswald for sand, at $1.00 per cubic yard.

The balance of the work was done by day's labor. The old work was entirely taken out and new foundations made by laying planks wherever it was thought necessary under the side walls. The stone of the old arch were used in repaving the bottom of the new sewer, they being especially adapted for the purpose; they were closely set together and thoroughly grouted with hydraulic cement. The side walls are built of large, well-shaped blocks of stone, and can be classed as a good piece of rough-hammered work laid in cement, eighteen inches above the top of the pavement. On this wall are laid large skew-backs, showing eight inches face, eighteen inches whole depth, and averaging from five to ten feet in length, and with an average width of two feet nine inches. From the skew-backs was sprung

a 14-inch brick arch, with a span of 16½ feet and a middle rise of four feet, giving a water area of 74 $\frac{86}{100}$ square feet. There was inserted one man-hole 2′x2′ in the clear with a perforated casting set on the top.

My approximate estimate to build 250 linear feet was $8,628.50.

We built 251 linear feet, which cost $7,579.64, thereby saving $1,048.86.

The above work has been entirely completed, and in its construction nothing was spared to make the work first class in every respect, and I think the amount saved from the original estimate is greatly attributable to the services of the efficient foreman and laborers under his charge.

Respectfully yours,

CHAS. A. HOOK,
Engineer in Charge.

SEWER AT INTERSECTION OF PATAPSCO AND McELDERRY STREETS.

The Mayor and City Council, by Resolution No. 148, approved June 15, 1883, instructed the City Commissioner to construct a sewer at the intersection of Patapsco and McElderry streets. The sum of $4,095.40 was appropriated for the purpose. This work was also put in charge of Mr. Hook, whose report herewith given is fully descriptive of the same:

BALTIMORE, October 4, 1883.

Mr. Thomas S. Wilkinson,
City Commissioner:

DEAR SIR:

I herewith submit for your consideration my report on the completion of the sewer built at the intersec-

tion of Patapsco and McElderry streets. In making plans, etc., for the above work I had in contemplation the eventual extension of this sewer from the centre of McElderry street in both directions on Patapsco street, consequently located it in the centre of Patapsco street, where I thought the sewer would eventually be built. Its total length is 100 feet, which will be sufficient to prevent the necessity of building retaining walls for McElderry street when it is opened.

The sewer is a circular arch 11 feet in diameter. The foundation is built of large gneiss stone laid in cement, forming a cradle-wall, in which there were laid nine inches of brick work. The bottom is paved with blocks of Port Deposit stone, two feet nine inches each side of the centre, sufficiently wide to carry the constant stream of water. The arch consists of three rings of brick backed up with a spandrel wall laid in cement. Opposite the corners of McElderry and Patapsco streets there are inserted cast iron pipes 20 inches in diameter, which are intended for inlet connections when the streets are graded, etc.

At each end there are constructed aprons in a substantial manner to prevent the water in the future from undermining the masonry at the ends. In addition to the building of this sewer, I found it necessary to build a temporary dam across the stream to divert it into the sewer, and to prevent its washing around the sides of the sewer and possibly undermining it. The materials necessary for the construction of the above work were contracted for at the following prices: Daniel Donnelly, for the furnishing of bricks at $8.00 per thousand; I. H. Peddicord, for stone at $2.25 per cubic

yard; John Bullock & Son, for cement at $1.28 and $1.35 per barrel, allowing eight cents for empty barrels; Jas. Oswald, for sand at 65 cents per cart load; McClenahan & Bro., for Belgian blocks at 10½ cents per block.

The balance of the work was done by day's labor.

My approximate estimate was	$4,095 40
Total cost	3,777 98
Balance	$317.42

But for some work unforeseen in my approximate estimate, such as cast-iron pipes and the building of the dam to divert the stream, the balance would have been six or seven hundred dollars more.

In conclusion, I would suggest that when the grading of Patapsco and McElderry streets is sufficiently advanced, I would at once lay the pipes for the inlets, so that when the streets are paved the inlets can be built and be utilized to carry off the water accumulating at that point, thereby saving the embankment from washing away.

Respectfully yours,

CHAS. A. HOOK,
Engineer in Charge.

PRIVATE SEWERS.

There is now being laid large numbers of private sewers for drainage, particularly on Baltimore and the adjacent business streets. Baltimore street, from Charles to Eutaw street, having been almost continuously torn up all of last year. These drains are

many times laid with such character of pipes that give serious trouble, causing the street to be torn up again and again for repairs. I would respectfully suggest to the City Council the passage of an ordinance prohibiting the use of anything but iron pipe or brick in the construction of any private sewer or drain in any of the streets, lanes or alleys of the city, and that it shall be the duty of the City Commissioner to prescribe the size of the sewer or iron-drain pipe to be used in the construction of any private drain or sewer which in his judgment may be necessary for the work required of it.

As stated in my report for the year 1883, a thorough survey of the sewers in the westion section of the city was made, with a view to making the proper repairs upon them. It was found necessary to make extensive repairs, and the work was commenced at once, and continued during the past season. These sewers have been put in as thorough order as the amount of the appropriation for that purpose would allow. The sewers in the eastern section were repaired from time to time, as required. Under the head of "Repairs of Sewers" are included the location and cost of all general sewer and inlet repairs, and all new work, manholes, inlets, &c., not provided for by special appropriation.

SEWERS REPAIRED.

At the foot of Scott street	$32 52
St. Peter and Paca streets	121 90
Hamburg and Paca streets	129 17
Hamburg and Sterrett streets	156 59
Amount carried forward	$440 18

Amount brought forward	$440 18
Hamburg and Cross streets	53 00
St. Peter and Eiselin streets	42 00
Columbia avenue and Fremont street	200 21
Haw, near Fremont street	106 50
Bankard lane, near Fremont street	48 64
Penn and Portland streets	176 63
Penn and Pratt streets	167 41
Penn and King streets	43 01
Penn and Lombard streets	885 49
Pine and Vine streets	315 99
Arch and Baltimore streets	19 06
Arch and Saratoga streets	120 62
Arch and Josephine streets	134 85
Shields alley and Hoffman street	275 58
Pennsylvania avenue, near Wilson	835 43
Carey and Ramsey streets	276 91
Carey and Mulberry streets	83 86
Carey and Franklin streets	276 90
Calhoun street and Fafayette avenue	281 69
Calhoun street and Harlem avenue	87 60
Schroeder and Hollins streets	127 33
Schroeder and Lombard streets	192 11
Schroeder and Vine streets	174 74
Schroeder and Raborg streets	229 00
Pratt and Oregon streets	187 51
Lexington street and Arlington avenue	156 01
Carlton street and Acorn alley	94 00
Saratoga street and Carrollton avenue	120 80
Mulberry street and Carrollton avenue	163 72
	$6,316 78

Amount brought forward	$6,316 78

INLETS REPAIRED.

Druid Hill avenue and Laurens street	$18 91
Calhoun and Lanvale streets	87 25
Carey and McHenry streets	19 30
Carey and Hollins	24 20
Carey and Booth	30 01
Arch and Lexington streets	38 88
Arch and Vine streets	26 04
Columbia avenue and Fremont street	108 00
Light and Balderston streets	14 00
Front and Fayette streets	16 70
Saratoga and Holliday streets	22 70
McKim and Eager streets	27 40
	$6,750 17

NEW INLETS CHARGED TO REPAIRS OF SEWERS.

Division, near Wilson street, west side	571 05
" " " " east side	202 00
	$7,523 22

NEW MAN-HOLES CHARGED TO REPAIRS OF SEWERS,

Edmondson avenue and Calhoun street	49 72
Harlem avenue and Calhoun street	44 00
Hollins and Schroeder streets	40 04
Eden and Gough streets	94 93
Hanover and Lombard streets	34 85
Total	$7,786 76

The following new trapped inlets were constructed in pursuance of Resolution No. 68, approved April 3, 1883, and Resolution No. 35, approved March 3, 1883:

Southwest corner of Pennsylvania avenue and Townsend street.

Southwest corner of Pennsylvania avenue and Lanvale street.

Southwest corner of Baltimore and Ann streets.

Northwest corner of Baltimore and Wolfe streets.

West side of Division, near Wilson street.

Total cost	$1,871 05
Appropriation	1,300 00
Difference	$571 05

The difference was charged to repairs of sewers as above.

In addition to the above specified points, various repairs of a minor character were put upon the sewers and inlets in all parts of the city, from time to time, as the necessity for them arose, at a cost of $2,195.36.

Amount of appropriation for repairs of sewers	$10,000 00
Total expenditure	9,982 12
Balance	$17 88

Although the repairs made upon the sewers generally during the past year have been extensive, much work of the same nature remains to be done during the current year, in order that the present sewerage

system of the city may be rendered as safe and efficient as possible.

Your attention is also directed to several important recommendations relating to sewers contained in my report for the year 1882, pages 48 to 51.

SURVEY OF HARFORD RUN.

The Mayor and City Council, by Resolution No. 153, approved August 27, 1883, authorized the City Commissioner to have made an accurate survey and report to the City Council with plans and estimates for the continuation of the Harford Run Sewer from its present terminus at Gay street to North avenue.

In pursuance of said resolution, I ordered the plans and estimates to be made as directed, and I herewith submit report of Mr. John S. Patterson, Assistant Engineer of Harford Run Improvement, who made the drawings and who furnishes an estimate of the approximate cost of the work:

BALTIMORE, January 1, 1884.

Thomas S. Wilkinson, Esq.,
City Commissioner:

SIR:

In accordance with resolution of the Mayor and City Council No. 153, approved August 27, 1883, ordering an accurate survey to be made for the continuation of Harford Run Sewer from its present head at the south building line of Hoffman street, and about 70 feet west from the southwest corner of Hoffman and Wolfe streets, I made, under the instructions of Mr.

Charles A. Hook, the engineer-in-charge of the Harford Run Improvement, the survey as ordered.

Upon Mr. Hook's resignation, you instructed me to make the necessary drawings and give an approximate estimate of the cost for the construction of said sewer. In accordance with said instructions, I made the drawings and estimates called for. The proposed location of the sewer is as follows: Beginning at the head of the present sewer, as above mentioned, and running thence easterly along Hoffman street to Wolfe street, thence northerly along Wolfe street to Lanvale street, thence easterly along Lanvale street to Castle street, thence northerly along Castle street to Townsend street, thence easterly along Townsend street to Chester street, thence northerly along Chester street to connect with the sewer under Boundary avenue, making a total length of 3,007 feet, with a total fall of $16\frac{7}{10}$ feet. The said sewer to be circular in shape, with a diameter of eight feet in the clear, the capacity of which will, I think, be sufficient to carry off the drainage of all that area lying north of Hoffman street, and on the east and west sides of Wolfe street to Boundary avenue. It would be more economical to build the sewer at the present time, and there would, comparatively speaking, be a small amount of grading to be done, as the said streets are now unimproved. This would not be the case if it were deferred until these streets were graded and paved.

The approximate cost of construction of this sewer will be $14.55 per lineal foot, or a total of $43,758.

Respectfully submitted,

JOHN S. PATTERSON,
Assistant Engineer.

BRIDGES.

A thorough examination of the city bridges has been made, with reference to their present condition and requirements for the current year.

Argyle-avenue bridge, over the B. & P. R. R.

This bridge is in good condition generally, the only repairs necessary being the renewal of some portions of the foot-ways and the painting of parts of the iron-work, especially at the joints, to prevent oxidation.

North-avenue bridge, over Jones' Falls and N. C. R. W.

The flooring of one-half of the road-way of this bridge was renewed last year. The repairs at present required are the complete renewal of the top course of flooring on the remaining half of the road-way, some few repairs on the sidewalks, and a coat of paint on the iron span over the tracks of the N. C. R. W.

Maryland-avenue bridge, over the N. C. R. W.

This bridge is in good repair, the railroad company being responsible for the same.

Maryland-avenue bridge, over Jones' Falls.

The present condition of this bridge is good, the only repairs necessary being in the foot-ways. Portions of the iron-work require painting.

Charles-street bridge, over the N. C. R. W.

Present condition good. The railroad company is responsible for repairs to this bridge.

Charles-street bridge, over Jones' Falls.

The entire flooring of the road-way should be renewed and parts of the iron trusses painted.

Preston-street bridge, over Jones' Falls.

The entire road-way floor of this bridge is nearly worn out and should be renewed. The iron trusses require a coat of paint.

Eager-street bridge, over Jones' Falls.

This is an arch of brick and stone and needs no repairs.

Madison-street bridge, over Jones' Falls.

General condition good. The only work necessary will be some slight repairs to the sidewalks, and a coat of paint to be put on the iron floor-beams.

Monument-street bridge, over Jones' Falls.

One-half of the road-way floor was put down new during the year; the other half of the road-way, and portions of the foot-ways will require repairs, and the iron floor-beams should be painted.

Centre-street bridge, over Jones' Falls.

Slight repairs to the foot-ways, and the application of a coat of paint to the iron floor-beams will be necessary.

Bath-street bridge, over Jones' Falls.

Present condition very good, a new top-floor having been put down during the past year. No immediate repairs are necessary, with the exception of a coat of paint to be applied to the floor-beams.

Hillen-street bridge, over Jones' Falls.

Nothing required, except some slight repairs to the foot-ways, together with a coat of paint on the floor-beams.

Fayette-street bridge, over Jones' Falls.

No immediate repairs required, with exception of a coat of paint to be applied to the floor-beams.

Baltimore-street bridge, over Jones' Falls.

This bridge received a new top-floor during the year, and is in good order generally. The paint has become worn and dingy, and it would be an advantage to the bridge to give it a thorough repainting.

Lombard-street bridge, over Jones' Falls.

The flooring of this bridge is in good order, but the entire iron work should be thoroughly repainted.

Eastern-avenue bridge, over Jones' Falls.

General condition good. Some repairs to the sidewalks will probably be required during the year, and the trusses will require a new coat of paint.

Canton-avenue bridge, over Jones' Falls.

Flooring in good order, having been renewed during the past year. The entire iron work will require repainting.

Canton-avenue, Aliceanna-street and Lancaster-street bridges, over Harford Run Sewer.

These bridges are of recent construction, and do not require any repairs at present.

Boston-street bridge, over Harris' Creek.

This bridge having received a new floor, during the past year, is in excellent condition.

Monument-street, McElderry-street and Jefferson-street bridges, over Harford Run Sewer.

These bridges, which span the old Harford Run Sewer, are entirely of wood, and have been in position for a number of years, requiring constant repairs. At the present time the joists are rotten and unserviceable, and it will be necessary to reconstruct the bridges entirely, unless the old sewer is permanently closed.

Washington-avenue bridge, over Schroeder's Run.

This bridge is of recent construction, and is in excellent order.

Washington-avenue bridge, near Bayard street.

No repairs required at the present time.

Liberty-road bridge, near the Western Boundary.

No immediate repairs necessary, this bridge having been put in good condition during the year.

Ridgely-street bridge, over Chatsworth Run.

Condition at present very good.

Warner-street bridge, over Chatsworth Run.

This bridge is entirely new, having been rebuilt during the past fall, and is in perfect order.

Foot-bridge, at the foot of Scott street.

Condition excellent. This bridge replaces the old bridge which was taken down last summer, having become dangerous.

Bridges on Leadenhall Street, between Ostend and Stockholm streets.

These are small wooden bridges spanning the Race street sewer, and are at present in fair order.

West-street bridge, over Race-street Sewer.

Condition at present safe, but will probably require repairs to the flooring during the year.

Harman's bridge, at Spring Garden.

The condition of this bridge is becoming a matter for serious consideration. During the past year it has only been possible to render this structure comparatively safe by constant and extensive repairs. This is a case which will require special action of the Mayor and City Council with reference to an appropriation sufficient to cover the expense of putting this very important means of communication between the city and Anne Arundel county in a permanently serviceable and safe condition. The City Commissioner's report for the year 1882 contains a report by Messrs. Charles H. Latrobe and Wendel Bollman, setting forth the best methods for accomplishing the above suggested improvement, together with estimates of cost of the same.

Light-street bridge, at Ferry Bar.

Present condition safe, but extensive repairs to the flooring, which is badly worn in many places, will be required during the current year. The draw span of this bridge was provided during the past year with one new horizontal boiler, the old boiler having been inspected and adjudged unsafe, and the upright boiler has received various necessary repairs. At the present time the drawbridge and its machinery are in good order.

The condition of the bridges over Jones' Falls at the crossings of Calvert, St. Paul, North, Chase, Gay and Pratt streets, and the draw-bridge at the City Dock, is fully described in the report of the engineer

of the Jones' Falls Commission, with the exception of the Calvert, St. Paul and North-street bridges, which will require paint on a limited portion of the iron work below the floors.

In addition to the special repairs noted above, many repairs of a minor character have been made upon the various bridges, and their general condition at the present time is much better than at the date of the last annual report of this department.

In conclusion, I would direct attention to the great importance of protecting our bridges, by frequent and thorough painting, or otherwise. The iron work of the bridges spanning that part of Jones' Falls into which the refuse from manufacturing establishments and sewage are discharged are subjected to the deleterious action of gases arising from the gross impurities with which the water is charged, in consequence of which the paint is soon destroyed, and rapid and destructive oxidation of the iron ensues; especially is this the case with regard to the supporting members below grade. As ordinary paint, when subjected to these destructive influences, lasts but a short time, it might be advisable to employ some other protective substance, such as tar, asphalt, &c., basing the choice of material to be used upon the advice of experts in matters of that character.

Bridges on Union Railroad over Broadway and Gay Street.

On the 13th day of August, 1883, I received the following communication from Louis H. Barker, Esq., Assistant Engineer of the Baltimore Division of the Northern Central Railway Company:

BALTIMORE, August 13th, 1883.

Thos. S. Wilkinson, Esq.,
City Commissioner:

DEAR SIR:

We have concluded to replace the three Bollman bridges on the Union Railroad with new ones. They are at the crossings of Broadway, Gay street and Philadelphia Turnpike. The two last are now ordered, and we hope to get them erected this year. The replacement of the Broadway bridge will have to be postponed until the early spring. We desire and respectfully request your permission to erect temporary trestles under the bridge until that time. These trestles will be so arranged that the very small travel under the bridge will suffer no inconvenience, and upon the completion of the new bridge will be immediately removed.

Yours respectfully,

(Signed), LOUIS H. BARKER,
Assistant Engineer.

To which I sent the following reply:

BALTIMORE, August 15, 1883.

Louis H. Barker, Esq.,
Assistant Engineer N. C. R. R.:

DEAR SIR:

Your note of August 13th, notifying me of the intention of your Company to replace the bridges over your railroad tracks at Broadway, Gay street and Philadelphia Turnpike, over Philadelphia Road, was duly

received. In reply, I beg to say that I can see no objection to what you ask so far as Gay street is concerned. The Philadelphia Road being a county matter, it must be referred to the County Commissioners of Baltimore county for consideration. Now as to Broadway, there having been numerous complaints from various persons as to the height of the bridge, I would respectfully suggest a talk with you on this subject.

Truly yours,

THOS. S. WILKINSON,
City Commissioner.

On the 17th day of September, 1883, I again addressed Mr. Barker on this subject as follows:

BALTIMORE, September 17, 1883.

Louis H. Barker, Esq.,
Assistant Engineer N. C. R. R.:

DEAR SIR:

On the 13th day of August I received a letter notifying me of the intention of your company to rebuild the bridges over Broadway and Gay street. In reply, I suggested some objection to the height of the bridge. Since writing other objections have been made. I should be glad to know if the railroad company intend to improve the bridge across Broadway. An ordinance has been passed by the City Council, which is now awaiting the approval of the Mayor, to grade and pave Broadway between Hoffman street and North avenue, and before that ordinance goes into effect it is desirable to have the abutments of the railroad bridge set back

so as to allow the street to be graded and paved its length, and with its contemplated width unobstructed by these abutments. An early reply will oblige

Yours, &c.,

THOS. S. WILKINSON,
City Commissioner.

To which I received the following reply:

BALTIMORE, September 21, 1883.

Thomas S. Wilkinson, Esq.,
City Commissioner;

DEAR SIR:

Replying to your favor of the 17th instant, I beg to say that, although we would greatly prefer to retain the Broadway bridge at its present length, which was the width of the street at the time of its erection, we will make the new bridge upon the entire street as now laid out, provided all extra costs and expense incurred by making such a change are borne by Baltimore city. As it is proposed to erect this bridge in the early spring, our plans for the same will have to be prepared in a short time. Will you please advise me as soon as possible whether you wish us to alter our plans to suit the above conditions.

We will, in a few days, erect some temporary trestles under this bridge, simply to keep it in perfectly safe condition pending the substitution of a new one.

Yours, very respectfully,

LOUIS H. BARKER,
Assistant Engineer.

The explanation of this appears to be that the width of Broadway, as laid down on Poppleton's map, was 82 feet, 6 inches, from Belair avenue to Boundary avenue, when the Union Railroad built their bridge, and the bridge was built in accordance with the width of the street. By Ordinance No. 136, approved November 9, 1874, the Commissioners for Opening Streets were directed to open Broadway as follows: "From John street to north boundary, in continuation of Broadway northwardly, beginning for the same on the north side of John street, where it would be intersected by a line drawn in continuation of the west side of Broadway, as already opened south of John street, being, also, on the west side of Broadway, formerly Market street, as laid down on Poppleton's map of Baltimore city; and running thence northerly, on a line corresponding with said west side of Broadway, as laid down on Poppleton's map aforesaid, to the south side of North avenue, then easterly, binding on the south side of North avenue, one hundred and thirty feet, and eight inches; thence southerly to John street, on a line parallel to the first described or west line of said street, and parallel to the line of said street, as laid down on Poppleton's map aforesaid; and thence southwesterly, binding on the northwest side of John street, to the place of beginning."

Ordinance No. 94, approved May 26, 1876, repealed the aforegoing ordinance.

In the same year, Ordinance No. 154, approved October 28, 1876, was passed, being an ordinance to condemn and open Broadway, from Belair avenue to Boundary avenue, as follows:

Section 1. Be it enacted and ordained by the Mayor and City Council of Baltimore, that the Commissioners for Opening Streets in the city of Baltimore be and they are hereby authorized and required to condemn and open Broadway from Belair avenue to north boundary, in continuation of Broadway, northwardly, beginning for the same on the northwest side of Belair avenue or Gay street, where it would be intersected by a line drawn in continuation of the west side of Broadway as already opened south of Belair avenue, being also on the west side of Broadway, formerly Market street, as laid down on Poppleton's map of Baltimore city, and running thence northerly on a line corresponding with said west side of Broadway, as laid down on Poppleton's map aforesaid, to the south side of North avenue, thence easterly binding on the south side of North avenue 130 feet and 8 inches, thence southerly to Belair avenue on a line parallel to the first described or west line of said street, and parallel to the line of said street as laid down on Poppleton's map of the city of Baltimore, and thence southwesterly binding on the northwest side of Belair avenue to the place of beginning.

This is the law in force for the opening of Broadway. The abutments of railroad bridge on the west side of Broadway are in the correct situation, but that on the east side takes up more than the entire roadway. This is a matter of great importance, and I respectfully suggest some action be taken prior to the railroad company constructing the new bridge spoken of.

ORDINANCES AND RESOLUTIONS.

The work required to be done under the following ordinances and resolutions was not done for the reasons stated:

Ordinance No. 87, September 22d, 1883, to grade, pave and kerb Burgundy alley, between Hamburg and West streets. Not done, by the advice of the City Solicitor, because no one owning property thereon made application to have grade established according to law.

Resolution No. 197, October 20, 1883, to repair Carey street and Patterson avenue.

Resolution No. 216, November 1, 1883, to repair bed of Carrollton avenue.

Resolution No. 152, August 27, 1883, to repair Lanvale street, between Pennsylvania avenue and Druid Hill avenue.

Resolution No. 155, August 27, 1883, to repair North street.

Resolution No. 93, October 19, 1883, authorizing City Commissioner to construct a gutter in and across the bed of Preston street.

Ordinance No. 71, May 26, 1883, to change the kerb line on the south side of Sewell street by extending the kerb into the bed of the street a sufficient distance to leave a space south of it for a footway or sidewalk, and to grade and pave the same.

The foregoing were not done because of the exhaustion of the appropriation to which they were chargeable.

Ordinance No. 96, September 22, 1883, to grade, pave and kerb Eden street, between Hoffman street and Harford avenue.

The aforegoing ordinance is defective, in that one square covered by the same has not been condemned.

Ordinance No. 82, August 27, 1883, to grade, pave and kerb Fulton avenue, between Presstman street and North avenue.

This work was not done because the application for the establishment of the grade was not made until it was too late in the season to undertake the work. It will be done early in the spring.

Ordinance No. 83, approved August 27, 1883, providing for the grading, paving and kerbing of Robert street, between Madison avenue and McCulloh street. Not done, by the advice of the City Solicitor, because no one owning property thereon made application to have grade established according to law.

Ordinance No. 91, October 12, 1883, to regrade and repave Little Courtland street, between Hamilton and Centre streets. The opinion of City Solicitor as to the validity of this ordinance received too late for the work to be done during the past year.

Ordinance No. 66, May 17, 1883, to grade, pave and kerb Patterson Park avenue, between Oliver street and North avenue.

Application for the establishment not made until it was too late in the season to commence work.

Ordinance No. 24, April 16, 1883, to grade, pave and kerb Race street, between Fort avenue and Cross street.

A contract for this work was made with Mr. Patrick Reddington, May 19, 1883. The contractor proceeded with the work until he reached certain impediments which caused a suspension of the same. The whole matter is contained in the subjoined correspondence between the Comptroller and this department, growing out of the application of the contractor for payment of the work as far as completed:

COMPTROLLER'S DEPARTMENT,

BALTIMORE, October 11, 1883.

Thomas S. Wilkinson, Esq.,
City Commissioner:

DEAR SIR:

You will please furnish the following information:

1. Name of street to be paved.
2. Number and date of ordinance.
3. Name of contractor.
4. Progress of the work, and the proportion of the work already executed.
5. The sum you propose to pay on account.
6. The impediments that prevent the continued prosecution of the work.
7. The probabilities as to the time that will elapse before the contractor will be able to resume his work.

Yours, &c.,

JOSHUA VANSANT,
Comptroller.

To which I made the following reply:

CITY COMMISSIONER'S OFFICE,

BALTIMORE, October 11, 1883.

Hon. Joshua Vansant,
Comptroller:

DEAR SIR:

The grading, paving and curbing of Race street, between Fort avenue and Cross street, as per Ordinance No. 24, approved April 16, 1883, Patrick Reddington, contractor, having had to be suspended on account of the condition of the sewer in Race street, and the completion of the work depending on the action of the Mayor and City Council, the contractor made application to the City Commissioner for payment of the finished work, and, after consultation with the Mayor, the matter was referred to you, whereupon you submitted to me the aforegoing interrogatories, to which I make answer as follows:

1st Question. Name of street to be paved.

Answer. Race street, from Fort avenue to Cross street.

2d Question. Number and date of ordinance.

Answer. Ordinance No. 24, approved April 16, 1883.

3d. Question. Name of contractor.

Answer. Patrick Reddington.

4th Question. Progress of the work, and the proportion of the work already executed.

Answer. The work progressed with dispatch until it

was stopped by coming in contact with Race Street Sewer. There has been done up to this time:

2,500 cubic yards of grading, at 17 cts	$425 00
36,000 square feet of paving, at 5 cts	1,800 00
1,800 lin. feet kerbing, at 44cts	792 00
	$3,217 00

5th Question. The sum you propose to pay on account.

Answer. $2,500.00

6th Question. The impediments that prevent the continued prosecution of the work.

Answer. The impediment that prevents the continued prosecution of the work is that Race Street Sewer is in such condition that it is impossible to complete the work without covering it by arching from a point about two hundred feet south of West street, to Cross street. This will cost about $8,000.

7th Question. The probabilities as to the time that will elapse before the contractor will be able to resume his work.

Answer. This will depend largely upon the time the City Council makes an appropriation for covering the sewer in Race street.

Very respectfully,

THOMAS S. WILKINSON,
City Commissioner.

I would respectfully recommend that the Council take early action in this matter, so that in the beginning of the working season this work may be resumed and pushed to completion. The estimate of this work is as follows :

To cover with 12-inch beams and 9-inch arches, from the arch south of West street, to Cross street, 550 feet, at $15. ..... $8,250 00

FLAGSTONES.

List of flagstone crossings put down during the year 1883, charged to appropriation for flags and stepping-stones.

Location.	No. of Rows.
Lexington and North streets	1
Carey and Presstman streets	2
Gilmor and Presstman streets	1
Whatcoat and Presstman streets	2
Scott and Mangold streets	1
Scott and Cross streets	2
Chase and Caroline streets	2
Central avenue and Granby street	1
Conway and Warner streets	4
North avenue and St. Paul street	1
Park avenue and Wilson street	1
Exchange Place and Commerce street	1
Paca and Warner streets	2
Fayette street and Irwin Place	1
Baltimore street and Duncan alley	1
Washington and Chase streets	2
Harlem avenue and Gilmor street	2
Fulton avenue and Saratoga street	1

Location	No. of Rows.
Calhoun and Cumberland streets	1
Presstman and Calhoun streets	2
Mt. Vernon Place and Cathedral street	3
Lombard, between Central avenue and Lloyd street.	1
Eden, between Lombard and Pratt streets	1
Bounty lane and Caroline street	2
Boston and Gwynn streets	1
Canton avenue and Burke street	2
Jefferson and Wolfe streets	1
McDonough and Biddle streets	1
Bond and Hampstead streets	2
Chase and Valley streets	2
Greenmount avenue and Townsend street	2
Barclay and Townsend streets	1
Hull and Clement streets	1
Charles, near West street	1
West, near Light street	1
William and Cross streets	2
Park avenue and Saratoga street	3
Fulton avenue and Fayette street	1
Gilmor and Lanvale streets	1
Fayette and Amity streets	2
Aliceanna and Washington streets	1
Aliceanna and Ann streets	1
Fremont and Warner streets	1
Wells and Light streets	1
Johnson, near Ostend street	1
Orleans and Register streets	1
Caroline street, centre of Madison Square	1
Eden street, " " "	1
Chase street, " " "	1
Eager street, " " "	1

Location.	No. of Rows.
Mt. Vernon Place and Charles street	2
Front and Plowman streets	1
Essex and Gwynn streets	1
Patterson Park avenue and Bank street	1
Pratt and Castle streets	1
Baltimore and Washington streets	1
Sharp and Hill streets	2
Hill, between Charles and Light streets	1
Warren avenue and William street	3
Druid Hill avenue and Bloom street	2
Druid Hill avenue and McMechin street	2
Conway and Sharp streets	1
Fulton avenue and Pratt street	1
Spring street, centre of Eastern Square	1
Lombard and Castle streets	1
Pennsylvania avenue and Chapel street	1
Fayette and Castle streets	1
Hill and Charles streets	2
Fayette, between Pine and Fremont streets	1
McCulloh and Bloom streets	2
Eager and Calvert streets	1
Fairmount avenue and Castle street	1
Saratoga and Schroeder streets	4
Lexington and Schroeder streets	2
Stricker street, centre of Union Square	1
Hollins street, " " "	1
Centre and Holliday streets	1
Eastern avenue and Concord street	1
Greenmount avenue and Eager street	2
Fulton and Frederick avenues	1
Thames and Ann streets	2
Broadway, between Canton and Eastern avenues	1

Location.	No. of Rows.
Bond and Millinan streets	2
Front and Chestnut streets	1
Gay and Aisquith streets	1
Pratt and Calvert streets	1
Holliday, between Baltimore and Second streets	1
Greene and Dover streets	1
Eastern avenue and President street	2
Gough street, near Central avenue	1
Central avenue and Chew street	1
Heath and Hanover streets	1
Caroline street and Eastern avenue	2
Eden and Madison streets	1
Exchange Place and Holliday street	1
Total	134

Flagstones laid in connection with the repaving of West Baltimore street, from Greene street to Gilmor street, with Belgian blocks:

Baltimore and Arch streets	3	rows.
" " Pearl "	3	"
" " Greene "	1	row.
" " Pine "	1	"
" between Pine and Fremont streets	1	"
" and Callender alley	1	"
" " Oregon streets	3	rows.
" " Schroeder "	3	"
" " Dewberry alley	1	row.
" " Carrollton avenue	4	rows.
" " Stockton alley	1	row.
" " Carey streets	3	rows.
" " Calhoun "	4	"
" " Stricker "	3	"
" " Gilmor "	3	"
Total	35	rows.

Flagstones laid in connection with the repaving of East Baltimore street, from Jones' Falls to Broadway, with Belgian blocks:

Baltimore and Central avenue			1 row.
"	between Central avenue and Aisquith street		1 "
"	and Aisquith streets		1 "
"	" Lloyd	"	2 rows.
"	" East	"	1 row.
"	" High	"	1 "
"	" Temple	"	1 "
"	" Albemarle	"	1 "
"	" Front	"	2 rows.
"	" Eden	"	1 row.
"	" Dallas	"	1 "
"	" Bethel	"	1 "
"	" Broadway		1 "
Total			15 rows.

Flagstones laid in connection with the repaving of Broadway, from Canton avenue to Thames street, with Belgian blocks:

Broadway and Lancaster street			3 rows.
"	" Aliceanna	"	2 "
"	" Canton avenue		1 row.
Total			6 rows.

Flagstones laid in connection with the repaving of Eutaw street, from Camden to Madison street, with Belgian blocks:

Eutaw and German streets	.....	1 row.
" " Baltimore "	.....	1 "
" " Fayette "	.....	1 "
" " Marion "	.....	1 "
" " Lexington "	.....	1 "
" " Clay "	.....	1 "
" " Saratoga "	.....	1 "
" between Mulberry and Franklin streets.		1 "
" and Franklin streets	.....	4 rows.
" " New "	.....	1 row.
" " Ross "	.....	2 rows.
" " Monument "	.....	3 "
" " Madison "	.....	3 "
" " Pratt "	.....	3 "
" " Lombard "	.....	4 "
" between Lombard and German streets..		1 row.
Total	.....	29 rows.

Flagstones laid in connection with the repaving of Camden street, from Light to Charles street, with Belgian blocks:

Camden and Charles streets—total	.....	4 rows.

Flagstones laid in connection with the repaving of Charles street, from Conway street to Madison street, with Belgian blocks:

Charles and Conway streets	.....	4 rows.
" " Balderston "	.....	1 row.
" " German "	.....	2 rows.
" " Baltimore "	.....	1 row.
" " Fayette "	.....	2 rows.
" " Barnet "	.....	3 "

Charles, between Saratoga and Pleasant streets	1 row.
" and Pleasant streets	1 "
" " Mulberry "	1 "
" " Franklin "	4 rows.
" " Hamilton "	4 "
" " Centre "	2 "
Total	26 rows.

The flagstones laid in connection with the repaving of streets on both sides of Lexington Market, from Eutaw street to Pearl street, with Belgian blocks:

Louisiana avenue and Pearl street	3 rows.
" " " Greene "	2 "
Lexington and Greene streets	1 row.
" between Greene and Paca streets	2 rows.
" and Paca streets	2 "
Louisiana avenue, between Greene and Paca streets	2 "
Louisiana avenue, between Eutaw and Paca streets	2 "
Louisiana avenue and Eutaw street	1 row.
Lexington, between Eutaw and Paca streets	2 rows.
" and Eutaw streets	1 row.
Total	18 rows.

GUTTER-PLATES

The following is a list of the iron gutter-plates put down during the year, with the cost of each set, including labor, materials, &c.:

East and west gutters at Chester and Alice-anna streets	$1,790 87

The above were paid for out of the appropriation of $2,250 for gutter-plates, for the year 1883.

The following were required in connection with the repaving of West Baltimore street, East Baltimore street, Eutaw street, Charles street, and the streets around the Lexington Market, and have been charged to Ordinance No. 140, approved October 4th, 1880 :

North gutter at Baltimore and Greene streets, new set of plates	$372 32
East and west gutters at Baltimore and Fremont streets, old plates reset	516 90
Total cost	$889 22
North gutter at Baltimore and Exeter streets, new set of plates	190 84
North and south gutters at Baltimore and Caroline streets, new set of plates	1,023 36
Total cost	$1,214 20
East and west gutters at Eutaw and Franklin streets, new set of plates	519 58
East and west gutters at Eutaw and Lombard streets, new set of plates	685 74
East and west gutters at Eutaw and Baltimore streets, old plates reset	266 22
East and west gutters at Eutaw and Fayette streets, old plates reset	242 28
West gutter at Eutaw and Lexington streets, old plates reset	253 31
North and south gutters at Eutaw and Monument streets, old plates reset	191 00
South gutter at Eutaw and Madison streets, old plates reset	95 12
East and West gutters at Eutaw and Pratt streets, old plates reset	200 45
Total cost	$2,453 70

East and west gutters at Charles and Lombard streets, new set of plates	$542 50
North and south gutters at Charles and Camden streets, old plates reset	47 05
East gutter at Charles and German streets, old plates reset	59 61
East and west gutters at Charles and Baltimore streets, old plates reset	276 24
East and west gutters at Charles and Fayette streets, old plates reset	94 08
West gutter at Charles and Lexington streets, old plates reset	77 01
Across Charles street, at the north side of Saratoga, a sixteen-inch pipe was laid, to permit the proper shaping of the intersection, by abolishing the former deep gutter at that point	469 61
Total cost	$1,566 10

East gutter at Lexington Market and Pearl street, new set of plates	$470 21
West gutter at Lexington Market and Greene street, new set of plates	490 48
East gutter at Lexington Market and Greene street, old plates reset	243 92
East and west gutters at Lexington Market and Paca street, new set of plates	990 60
Total cost	$2,195 21

The above gutters were all paved with bricks, in cement, and were put in the best permanent condition.

The report of the Jones' Falls Commission will be found herewith appended, together with the report of Charles H. Latrobe, Esq., Engineer of the Commission, which fully sets forth the work done during the past year in the improvement of the Falls.

Thanking his Honor, the Mayor, and the members of the City Council generally for their many acts of courtesy and kindness, this report is respectfully submitted.

THOS. S. WILKINSON,
City Commissioner.

LIST OF TABLES ANNEXED TO CITY COMMISSIONER'S REPORT FOR THE YEAR 1883.

Table A exhibits the amount of appropriations, the amounts expended, and the balances due on the several appropriations.

Table B shows the amount of money required for the year ending 31st December, 1884.

Table C states the number of streets, lanes and alleys paved, with names of contractors, dates of acceptance of work, and amount of paving done.

Table D exhibits the amount of superficial feet of repaving done to December 31, 1883, and all the different localities in which it was done.

Table E shows the names of superintendents of repair gangs, quantity of work done, and material used by each, together with cost of same.

Table F exhibits the revenue received in the department for the year ending 31st December, 1883.

TABLE A.

Showing the Amount of Appropriations and the Balances due on the several Appropriations for the year ending 31st December, 1883.

ACCOUNTS.		Appropriations.	Amounts Paid.	Amounts Undrawn.
Repairs of sewers and inlets	$10,000 00			
Paid Register	1,309 52			
		$11,309 52	$9,982 12	$1,327 40
Flag and stepping-stones		8,000 00	7,993 60	6 40
Repairs of paved streets	$74,000 00			
Paid Register	531 62			
		74,531 62	73,996 94	534 68
Repairs of bridges		6,800 00	6,778 67	21 33
Paving and repaving in front of city property		1,000 00	999 27	73
Incidentals		50 00	23 00	27 00
Salaries		9,000 00	9,000 00	.....
Livery of horses		700 00	700 00	.....
Paving and repaving of "cross streets"		10,000 00	9,791 81	208 19
Paving of new streets		64,093 04	64,093 04	.....
Repairs of unpaved streets	$2,500 00			
Less transferred to account in "repairs of bridges"	800 00			
		1,700 00	1,337 23	362 77

Improvement of Jones' Falls	$52,069 24			
Paid Register	91 39			
		52,160 63	52,069 24	91 39
Extension of Harford Run sewer		9,000 00	8,998 18	1 82
Improvement of Harford Run	$13,257 04			
Improvement of Harford Run on account of explosion of 4th of April, '83.	1,743 76			
Improvement of Harford Run sewer at Patapsco and McElderry streets	3,777 98			
		18,778 78	18,778 78	.....
Repairs of Harford Run sewer, per Resolution No. 5, of 23d November, 1882.	$8,682 50			
Less transferred to account for "repairs of paved streets"	1,000 00			
		7,682 50	7,661 81	20 69
Light street bridge		1,260 00	1,033 44	226 56
Iron gutter-plates		2,250 00	1,965 13	284 87
Preston street, changing grade of, per Ordinance 123, of 21st October, 1882		4,449 44	3,983 94	465 50
Pennsylvania avenue, kerbing east side, &c., per Resolution 270, of 1st November, 1881		80 00	80 00	.....
Shelling Warner street, per Resolution 53, of 31st of March, 1883		200 00	193 15	6 85
Amounts carried forward		$283,045 53	$279,459 35	$3,586 18

TABLE A—Continued.

ACCOUNTS.		Appropriations.	Amounts Paid.	Amounts Undrawn.
Amounts brought forward		$283,045 53	$279,459 35	$3,586 18
Trapping sewers in Pennsylvania avenue, &c., per Resolution 68, of 3d April, 1883		1,300 00	1,300 00	.....
Fulton avenue, &c., changing grade of, per Ordinance 40, of 24th April, 1883		11 00	11 00	.....
Paving Loan of 1920, General. Paid Register		117 56		117 56
Paving Loan of 1920, Charles street, from Chase street to North avenue	$2,086 45			
Paving Loan of 1920, Charles street, from Chase street to North avenue, less paving blocks transferred to other streets.	845 00			
	$1,241 45			
Paid Register	794 55			
		2,036 00	1,241 45	794 55
Paving Loan of 1920, Gay street, between Pratt and Aisquith streets		26,085 56	26,085 56	.....
Paving Loan of 1920, Eutaw Place, between Laurens street and North avenue		26,198 21	26,198 21	.....

Paving Loan of 1920, Eutaw Place, between Laurens and Dolphin streets..	$39,354 03			
Paid Register.....	325 00			
		39,679 03	39,354 03	325 00
Paving Loan of 1920, Baltimore street, between Greene and Gilmor streets.				
Paving Loan of 1920, Baltimore street, from Harrison street to the "Falls."	$74,186 11			
Paid Register.....	1,651 41			
		75,837 52	74,186 11	1,651 41
Paving Loan of 1920, Baltimore street, from Jones' Falls to Broadway.....	$45,617 38			
Paid Register.....	419 95			
		46,037 33	45,617 38	419 95
Paving Loan of 1920, Block street, from West Falls avenue to Drawbridge...	$6,336 12			
Paid Register.....	30 00			
		6,366 12	6,336 12	30 00
Paving Loan of 1920, Calhoun street, between Harlem and Edmondson avenues.....		5,366 13	5,366 13	.....
Paving Loan of 1920, Eutaw street, from Camden to Madison streets....	$69,813 26			
Amounts carried forward.....		$512,079 99	$505,155 34	$6,924 65

TABLE A—Concluded.

ACCOUNTS.		Appropriations.	Amounts Paid.	Amounts Undrawn.
Amounts brought forward		$512,079 99	$505,155 34	$6,924 65
Paid Register	$177 55			
		69,990 81	69,813 26	177 55
Paving Loan of 1920, Charles street, from Conway to Madison street	$44,437 24			
Paid Register	222 15			
		44,659 39	44,437 24	222 15
Paving Loan of 1920, Lexington street, from Charles to Eutaw street		141 85	141 85	.....
Paving Loan of 1920, Broadway, from Canton avenue to Thames street	$22,977 98			
Paid Register	17 80			
		22,995 78	22,977 98	17 80
Paving Loan of 1920, Marsh Market Space		3,630 83	3,630 83	.....
Paving Loan of 1920, Camden street, from Charles to Light street	$4,750 50			
Paid Register	25 00			
		4,775 50	4,750 50	25 00

Paving Loan of 1920, Lexington Market, streets on both sides of.....	$16,054 20		
Paid Register.....	9 62		
	16,063 82	16,054 20	9 62
	$674,337 97	$666,961 20	$7,376 77

TABLE B.

Showing the amounts required for the City Commissioner's Department, for the year ending 31st December, 1884.

Repairs of paved streets	$75,000 00
" bridges	10,000 00
" sewers and inlets	10,000 00
" unpaved streets	3,000 00
Flag and stepping-stones	10,000 00
Paving in front of city property	1,000 00
Paving and repaving "cross streets"	20,000 00
Incidentals	50 00
Salaries	9,000 00
Livery of horses	700 00
Light-street Bridge	1,500 00
Raising grade of Fulton avenue, Baker Circle, &c	6,920 00
	$147,170 00

TABLE C.

Statement of Streets, Lanes and Alleys paved for the year ending 31st December, 1883.

Names of Streets, &c.	Contractors' Names.	No. of Sq. Feet	Price per Sq. Foot.	Date of Contract.	Date of Acceptance.
Caroline street, between John street and Boundary avenue	James P. McGovern.	117,295	6½ cents.	Oct. 31, 1881.	March 20, 1883
McKim street, between Eager and Hoffman streets	Owen Patterson.	60,038	6¼ "	June 14, 1882.	Feb. 20, "
Morton alley, between Preston and Hoffman streets	J. H. D. Boone.	4,119	5 "	Nov. 22, "	April 1, "
Ensor street, between Chase street and North avenue	Jos. G. Loane & Co.	80,391	5 "	July 14, "	" 30, "
Dolphin street, between Fremont street and Myrtle avenue	John Lyons & Son.	23,834	5½ "	March 10, 1883.	May 8, "
Bloom street, between Madison avenue and Eutaw Place	M. J. Flannery.	12,470	5 "	" 5 "	" 7, "
Chapel street, between Jefferson and Monument streets	J. H. D. Boone.	5,890	4¾ "	May 19. "	June 23, "
Arch street, between Baltimore and German streets	By day's labor.	3,150			Aug. 8, "
Aliceanna street, west of President street	Sweikert & Bates.	9,149	5¼ "	May 5, "	June 25, "
East Falls avenue, south of Canton avenue	"	15,200	5¼ "	" " "	" " "
Mount street, between Lanvale and Townsend streets	Clifford, Switzer & Hull.	4,159	4½ "	June 30, "	July 16, "
Eagle street, between Fulton and Monroe streets	Patrick Reddington.	17,241	5 "	" 13, "	" 6, "
Monroe street, between Wilkens avenue and Eagle street	"	16,865	5 "	" " "	" 17, "

Harlem avenue, between Fremont street and Myrtle avenue	James P. McGovern.	23,279	5 cents.	March 10, 1883	July 31, 1883.
Norris alley, between McHenry and Ramsay streets	Patrick Reddington.	4,406	5 "	June 30, "	Sept. 5, "
York street, between William and Johnson streets	"	3,011	5 "	" 13, "	Aug. 17, "
East Falls avenue, between Pratt and Granby streets	John Flinn & Co.	4,189	4 "	Aug. 8, "	Sept. 1, "
Bond street, between Hoffman street and Boundary avenue	Jos. G. Loane & Co.	88,139	4⅝ "	Dec. 30, 1881.	Aug. 29, "
North st., from Chase to Preston st.	Patrick Reddington.	23,040	5 "	June 30, 1883.	Nov. 22, "
Cathedral street, between Mulberry and Saratoga streets	John Haugh.	13,910	4½ "	Oct. 29, "	Dec. 1, "
Hare st., between Elliott and Boston sts.	Langeman & Strine.	12,216	Private.	Jan. 13, "	March 1, "
Canton street, between Elliott and Boston streets	J. H. D. Boone & Co.	19,550	"	Feb. 9, "	May 1, "
McMechen street, between Mount Royal and North avenues	N. Balto. R. R. Co.	12,240	"	April 11, "	Aug. 1, "
Stoddard alley, between Wilson and Laurens streets	John Flannery.	6,830	"	June 9, "	Oct. 1, "
Luzerne street, between Madison and Monument streets	J. H. D. Boone.	12,480	"	Aug. 28, "	
Presstman street, between Mount street and Fulton avenue	John G. Schwind.	11.700	"	Oct. 15, "	Dec. 11, "
Rutter alley, between Lanvale and Dolphin streets	Owen Patterson.	4,092	"	Nov. 17, 1882.	May 1, "
Mosher street, between Fulton avenue and Mount street	James Fahey.	6,435	"	May 16, 1883.	Not accepted.
Twenty-foot alley, north of Edmondson avenue, between Edmondson and Harlem avenues	Meers & Finn.	2,969	4½ cents.	Sept. 14, "	" "
Total square feet		628.287			

TABLE D.

Showing the quantity of Repairs done on the Streets and Alleys during the year 1883.

STREETS.	Area in Sq. Feet.	Loads of Sand.	Perches of Stone.	Linear Feet Kerb Reset.
Aisquith street	16,890	154	27	237
Ann street	19,164	213	32½	963
Aliceanna street	1,827	9	.....	.....
Argyle Avenue	39,927	394	45½	123
Broadway	28,838	423	48	78
Buren street	3,860	37	4	.....
Baker street	1,469	18	¾	.....
Bond street	18,819	152	33	202
Baltimore street	800	3	2	58
Biddle street	16,624	155	34½	.....
Bethel street	13,635	104	14½	373
Boston street	16,030	106	16	.....
Block street	25,766	347	54½	809
Barnes street	9,192	52	4½	316
Burke street	4,518	35	5½	8
Bank street	1,375	13	½	117
Chase street	55,021	583	124	1,115
Canton avenue	73,270	733	66	701
Charles street	45,454	559	129	25
Commerce street	28,884	363	43½	182
Cathedral street	17,098	199	40	55
Central avenue	9,048	110	13½	289
Chester street	300	.....	.....	.....
Cambridge street	11,458	74	8½	.....
Chapel street	1,203	16	.....	.....
Amts. carried forward	460,470	4,852	747¼	5,651

TABLE D—Continued.

STREETS.	Area in Sq. Feet.	Loads of Sand.	Perches of Stone.	Linear Feet Kerb Reset.
Amts. brought forward	460,470	4,852	747¼	5,651
Castle street	4,744	28	2½	68
Centre street	100	7	34	.....
Comet street	1,726	17	....	.....
Conway street	3,127	43	4	130
Cross street	12,199	144	5	24
Calvert street	370	4	15½	.....
Courtland street	90	1	1	.....
Calhoun street	1,310	28	½	.....
Cable street	3,597	45	1	.....
Chew street	213	14	8	10
Canton street	8,781	62	1	.....
Concord street	190	9	7	.....
Chesapeake street	640	9	½	.....
Carey street	4,411	65	4½	.....
Dallas street	10,881	92	24½	1,117
Division street	7,360	14	3	.....
Dillon street	3,365	27	2	30
Durham street	5,815	56	2	486
Davis street	7,760	105	16½	71
Eutaw street	32,396	557	103	397
Edmondson avenue	1,246	10	1½	.....
Elliott street	2,345	14	3½	.....
Eastern avenue	56,424	539	167½	919
Eager street	67,324	770	119½	575
Ensor street	4,600	35	14	36
Eden street	22,205	216	45½	151
Exeter street	15,315	174	22	207
Amts. carried forward	739,004	7,937	1,356¼	9,872

TABLE D—Continued.

STREETS.	Area in Sq. Feet	Loads of Sand.	Perches of Stone.	Linear Feet Kerb Reset.
Amts. brought forward	739,004	7,937	1,356¼	9,872
Franklin street	34,589	328	63	166½
Frederick street	697	.....	.....	.....
Fawn street	23,489	270	45	269
Front street	14,931	151	49½	.....
Fort avenue	66,726	884	109¾	208
Fremont street	172,551	2,566	475	27
Fayette street	49,481	451	127	631
Forrest street	3,490	36	6½	79
Greene street	15,185	133	36¾	.....
Gist street	3,733	36	81	.....
Gilmor street	9,286	106	12¼	78
Gay street	2,199	17	1	56
Gwinn street	2,314	14	5	.....
Gough street	5,859	49	8	70
Hill street	21,822	277	71	.....
High street	43,308	324	73½	755
Holliday street	4,565	85	15½	.....
Hudson street	29,060	222	36½	12
Hamilton street	5,183	43	10½	.....
Haubert street	3,854	33	8¾	.....
Harford avenue	6,474	59	25	294
Hull street	50,278	418	95	.....
Hillen street	17,918	202	30	314
Howard street	38,787	557	70	.....
Hanover street	10,970	153	22½	.....
Hoffman street	2,767	25	3	.....
Henrietta street	997	12	2½	.....
Amts. carried forward.	1,379,517	15,388	2,839¾	12,831½

TABLE D—Continued.

STREETS.	Area in Sq. Feet.	Loads of Sand.	Perches of Stone.	Linear Feet Kerb Reset.
Amts. brought forward	1,379,517	15,388	2,839¾	12,831½
John street	1,055	14	1½	.....
Jefferson street	20,047	274	37	339
Irvin Place	810	9	1	.....
Light street	36,365	587	82	.....
Lexington street	10,907	210	16½	360
Luzerne street	2,445	17	3½	.....
Little Montgomery st.	3,129	61	5½	.....
Lafayette Market	1,425	15	3	.....
Low street	44,241	459	71	2,604
Lee street	26,072	390	86	.....
Long Dock	765	7	1½	.....
Leakin street	210	7	1	.....
Lancaster street	5,478	64	9¾	.....
Leadenhall street	58,523	810	110½	.....
Monument street	41,617	439	86¾	143
Montgomery street	7,141	134	15	30
Mullikin street	4,675	54	5	323
McElderry street	8,001	64	8	687
Mill street	1,620	12	1½	33
Madison street	164,235	2,149	456	4,657
Mosher street	27,064	391	38½	.....
McCulloh street	8,466	69	17	.....
North street	9,925	95	16	138
Orleans street	45,757	426	123	744
O'Donnell street	11,099	114	24	.....
President street	2,195	11	1½	.....
Patuxent street	590	.....	.....	.....
Amts. carried forward	1,923,374	22,270	4,061¾	22,889½

TABLE D—Continued.

STREETS.	Area in Sq. Feet.	Loads of Sand.	Perches of Stone.	Linear Feet Kerb Reset.
Amts. brought forward	1,923,374	22,270	4,061¾	22,889½
Pierce street	398	5	1½	.....
Park avenue	2,375	13	.....	.....
Preston street	12,418	188	19½	.....
Pennsylvania avenue	49,389	590	93¼	212
Patterson avenue	35,522	506	96½	12
Pratt street	10,070	201	18½	.....
Ridgeley street	47,724	799	117¾	.....
Randall street	2,200	81	6½	.....
Rice street	5,969	107	6	.....
Saratoga street	17,180	108	54¼	.....
Somerset street	110	.....	.....	8
St. Joseph's street	3,713	95	6	10
Stirling street	8,832	97	29	774
Spring street	3,017	84	1½	432
Sewell street	1,632	18	4	.....
St. Paul street	34,145	384	69¾	.....
Streeper street	1,680	25	3	25
Sterrett street	1,378	21	4	.....
Thompson street	2,941	24	9	170
Thames street	1,620	21	8½	39
Townsend street	3,285	34	7½	.....
Various sts., alleys, &c.	7,948	92	18	20
Washington street	224	.....	.....	.....
Wolfe street	56,965	622	107	268
Wilson street	7,014	73	12½	.....
William street	.....	.....	.....	82
West street	2,816	85	5	.....
York street	2,194	84	5¾	.....
	2,246,133	26,627	4,766	24,941½

TABLE D—Continued.

Showing Quantity of Repairs Done in Lanes and Alleys.

	Area in Sq. Feet.	Loads of Sand.	Perches of Stone.	Linear Feet Kerb Reset.
Abell alley	6,050	64	9½	.....
Bradford alley	428	.....	.....	.....
Clover alley	1,160	10	2	.....
Campbell alley	3,550	46	2	.....
Chestnut alley	8,728	86	11	.....
Guilford alley	1,687	17	3¾	.....
Garrett alley	4,620	38	10½	.....
Goldsmith alley	1,221	23	9¾	.....
Harris alley	1,198	8	½	.....
Harmony lane	915	22	3	.....
Hegam's alley	1,923	16	3½	.....
Lovegrove alley	1,380	9	2½	.....
Morton alley	3,380	40	6	60
McClellan's alley	1,025	20	4½	.....
Madeira alley	3,171	39	9	299
Monmonier's court	2,200	12	1	.....
McCulloh alley	2,358	22	5	.....
O alley	1,378	19	3¾	.....
Pin alley	442	7	½	.....
T alley	1,235	11	1½	38
Wilmer alley	1,438	12	.....	.....
Welcome alley	591	.....	.....	.....
	50,078	521	89¼	397

TABLE D—Concluded.

Grand Total Quantities in Repairs of Streets and Alleys.

	Area in Sq. Feet.	Loads of Sand.	Perches of Stone.	Linear Feet Kerb Reset.
Streets.....	2,246,133	26,627	4,766	24,941½
Alleys.....	50,078	521	89½	397
	2,296,211	27,148	4,855¼	25,338½

TABLE E.

Showing quantity and cost of work done by Superintendents of Street Repairs.

SUPERINTENDENTS.	Square feet Paving.	Loads of Sand.	Perches of Stone.	Linear feet Kerb reset.	Cost.
W. H. Lennon	176,730	2,715	408	1,597	$5,539 80
G. E. Weaver	218,288	2,100	443½	2,264	5,475 43
G. W. Snyder	192,864	2,494	466¾	2,312	5,644 51
G. H. Clifton	179,879	2,394	325	696½	5,204 12
John C. Hay	205,435	2,783	527	395	5,423 76
William Dickson	203,387	2,760	408	662	5,340 86
W. T. Stilley	187,725	1,686	197	1,359	5,034 95
M. Naughton	186,630	1,890	387	2,935	5,185 23
L. Schlessinger	178,833	2,105	322½	3,176	5,525 69
T. W. Selvage	179,704	1,808	350½	4,570	6,125 89
P. M. Holbrook	179,625	1,871	526	4,985	5,465 53
John L. Brown	207,111	2,542	494	387	5,520 19
	2,296,211	27,148	4,855¼	25,338½	$65,485 96

TABLE F.

Showing the Revenue received in the Department of the City Commissioner for the year ending 31st December, 1883.

On What Account Received.	Amounts.
Vaults and areas	$ 852 50
Repairs of sewers	1,309 52
Repairs of paved streets	531 63
Improvement of Jones' Falls	91 39
Paving Loan of 1920	3,790 59
Public printing	142 50
	$6,718 13

REPORT

— OF —

The Jones' Falls Commission,

— TO THE —

MAYOR AND CITY COUNCIL OF BALTIMORE,

— FOR THE —

FISCAL YEAR ENDING DECEMBER 31, 1883.

REPORT.

BALTIMORE, January 1, 1884.

To the Honorable the Mayor
and City Council of Baltimore:

GENTLEMEN:

The work on Jones' Falls has progressed favorably during the past year, and has been done in a most substantial and workmanlike manner by labor employed directly by the city, and under the immediate supervision of city officers. The amount expended was $59,897.32; there yet remains as an unexpended balance of the original sum for which bonds were authorized to be issued for the improvement of the Falls, $776,070.00. It is proposed, during the ensuing season, to continue the construction of retaining walls as far north as Charles street, and to erect a bridge over the bed of the Falls at Biddle street. Full details of what has been done in connection with this improvement, together with many valuable suggestions in its connection, will be found in the able report of the Engineer, Mr. Charles H. Latrobe, which is herewith submitted and adopted

as a portion of the report of this Commission to the Mayor and City Council.

Very respectfully,

FERDINAND C. LATROBE,
Mayor.

THOMAS S. WILKINSON,
City Commissioner.

Commissioners for the
Improvement of Jones' Falls.

ENGINEER'S REPORT.

BALTIMORE, December 31st, 1883.

HON. F. C. LATROBE, *Mayor*,
THOS. S. WILKINSON, ESQ., *City Commissioner*,
Jones' Falls Commission:

GENTLEMEN:

Permit me to submit for your consideration my report of the work done on the Jones' Falls improvement during the year ending December 31st, 1883.

The work of the year just ended has consisted principally in the continuation of the support walls on the upper and lower Falls.

1st. The work on the upper Falls, between Chase and Eager streets, was kept going from the beginning of the year until January 27th, when the weather became so severe that all hands were suspended except in the stone yard, where the cutters did a little from time to time.

On February 19th, the weather having moderated considerably, we again started between Chase and Eager streets, and continued the support wall south

until we made a junction with the west abutment of Eager street bridge on July 2d, 1883. As this wall is for some distance north of Eager street placed upon the property of the Northern Central Railway Company, their written consent was obtained to its construction, the wall being really of very great benefit to their property.

At a called meeting of the Jones' Falls Commission, held at the Mayor's office on June 12th, 1883, it had been decided to extend the support wall to its terminus, at that date, between Chase and Biddle streets, as far north as the north abutment of the Northern Central Railway bridge, at the old Pearl Hominy Mill, including the building of the west abutment of Biddle street bridge. The Engineer was also directed to establish and plat in the proposed location of the support walls as far as Charles street, which terminates the present scope of the improvement on the west bank, and from the south end of the east abutment of the Biddle street bridge to some point near the Union Railroad and Jenkins' Run on the east bank. In connection with the establishment of these lines, the Engineer was directed to communicate with Mr. Alex. Preston, who represented the Pearl Hominy Mill Company, in regard to obtaining for the city the right to construct the new support wall along the property of the said company, and to remove the old Belvidere dam, which belonged also to it. After some correspondence through Mr. Preston with N. Winters, Esq., of Dayton, Ohio, to whom a sketch of the proposed location of the wall as far as North street was sent, consent was obtained to build the wall and remove the dam, the location of the wall as far as North street being officially approved

and adopted by the Jones' Falls Commission and made a matter of record, with tracing attached, on their books. The preliminaries being arranged and the machinery shifted north of Chase street, we began work again near Biddle street on July 16th, and have at this date finished the work as far as the west abutment of Biddle-street bridge, thus permitting the grading and paving of North street, which has recently been completed.

We have now the derrick and machinery shifted into position for the building of the abutment proper, and much of the preliminary work done, such as preparation of foundation, etc., as well as a large amount of ashlar cut for the work ahead of us. On July 27th (permission having been obtained from the Pearl Hominy Mill, as above stated), we began the work of demolishing the Belvidere dam, and completed it on August 27th. It involved the removing of a large amount of stone and timber, but we now have a rapidly-running stream in the place of the dirty pool of water which formerly extended as far north as Charles street. The deposit within the dam was found to be principally sand and gravel, which even now might be drawn upon for repairs of streets. It may be safely said that the removal of this useless old dam was an important item in the Jones' Falls Improvement, as bearing upon the health of the community.

2d. The work on the Lower Falls: The support wall having been finished as far as the existing condemnation extended along the Western bank of the Falls, south of Gay street, the Engineer was directed by the Commission, at a meeting held November 2d,

1882, to remove the deposit of earth in the bed of the Falls, from Gay-street bridge to the theatre, the hauling away to be done by contract or otherwise. The hauling away having been contracted for with Charles M. Hope, gangs Nos. 1 and 2 were put to work under James R. Carroll, and early in January, 708 cubic yards of material had been excavated and hauled away. This cleaning up having been accomplished, the derrick was dismantled and the engine house moved, in readiness for the extension of the walls toward Fayette street, and on June 13th the entire force on the lower Falls was dismissed, including the foreman. Early in April, 1883, it was discovered that the ordinance passed during the previous winter for the further condemnation of property between Gay and Fayette streets was defective, the clause giving the right of appeal having been omitted. This put an end to the trial of the appeal, and it was decided by the Jones' Falls Commission to attempt the purchase of the ground, as far as possible. The consent of the people in interest was obtained by your Engineer, and a preliminary agreement executed between the owners and the city by which, pending the drawing up of the proper deeds, the work could go on. In consequence of this, work was resumed on June 18th, since which date it has been steadily pushed, and will be finished to the extent of our purchase by January 10th, 1884. A new and effective ordinance having been passed by the Council in October to cover the remaining ground between Gay and Baltimore streets, we must await the result of the review just made by the Commissioners for Openings Streets, and the adjustment of damages, before we can finish up on the lower Falls. On February 6th a

heavily-laden lumber car of the Baltimore and Ohio Railroad, drawn at high speed by sixteen horses, was derailed on Pratt street bridge and thrown into the centre truss, breaking one tie-bar 4 inches by 1 inch, and doing some other damage. The bridge was repaired and the Baltimore and Ohio Railroad paid the bill.

Early in March I had the eastern span of the Chase-street bridge examined, and found the gases from the engines of the Northern Central Railway which stand under it were doing it so much damage that I recommended to the Commission the boxing of the lower chords and floor beams, which was done. We have also within the past month completed the drain-wells and sewers connected with the west abutment of Chase-street bridge, and which were essential to the grading of North street at its intersection with Chase.

All the work done during this year has been days' work, except in some trifling cases, and tables of cost will be found below:

Amount and cost of masonry, built by day's work, on the support walls during 1883, *to December* 17, 1883.

GANG.	Lineal Feet of Wall.	Cubic Yards.	No. Piles Driven.	Lumber Bill.	Cost.	Cost per Cubic Yd.
No. 2	254 ft. 10 in.	512.20	255	6,691	$10,897 21	$21 27
No. 3	347 ft. 8 in.	3,242.32	.....	.....	34,317 33	10 58
Totals	602 ft. 6 in.	3,754.52	255	6,691	$45,214 54	$12 04

Average cost of masonry, per cubic yd. for 1883, $12.04.
The work of No. 2 rests upon a pile foundation.
The work of No. 3 rests upon solid rock.

Amount and cost of masonry, built by day's work, on the support walls from average date of June 15th, 1881, to December 17, 1883.

GANG.	Linear Feet of Wall.	Cubic Yards.	No. Piles Driven.	Lumber B. M. in platform.	Cost.	Cost per Cubic Yd.
No. 1	759 ft. 4 in.	2,028.6	780	23,800	$39,068 88	$19 25
No. 2	1062 ft. 5 in.	2,874.4	815	23,987	53,257 40	18 53
No. 3	799 ft. 3 in.	7,100.3	.....	.....	82,508 34	11 62
Totals	2621 ft. .. in.	12,003.3	1595	47,787	$174,834 62	$14 56

Average cost of masonry, per cubic yard, since June 15th, 1881, $14.56.

The work of No. 1 rests entirely on pile foundation.
The work of No. 2 rests in part on pile foundation.
The work of No. 3 rests upon solid rock.

The work done by gang No. 2, on the lower Falls, has been all done since June 18th, 1883, a period of only six months and twelve days, owing to our inability to get possession of the property sooner. Its cost is much enhanced by the fact that it includes the cost of a piled foundation; the wall is also thin and low, consisting of little more than the cut ashlar, which is 64 per cent. of its entire bulk. The work done by gang No. 3, on the upper Falls, has been done in about eleven months. The foundations are laid everywhere on the solid rock,

which has been blasted into shape to receive them. The cost of the work is much less than on the lower Falls on account of a natural foundation, and also in the greater bulk of the wall, the proportion of ashlar being 41½ per cent. of the wall. In regard to the cost of work done by the day, it must be understood that the city pays its laboring men $33\frac{6}{10}$ per cent. more wages than outside parties, which enhances very much the cost of city work.

A complete exhibit of money spent on the improvement during the year just ended, will be found below, distributed to the various items named:

Detailed statement of work done during the year 1883, and its cost:

For masonry of support walls	$45,214 54
" removal of Belvidere dam	259 89
" boxing lower chords and floor-beams of Chase-street bridge	689 73
" building inlets at Chase street	195 16
" cleaning out Falls from Gay street to Low street	2,232 31
" pay of quarry inspector during suspension of work on lower Falls	108 00
" pay of watchman and laborers during suspension of active work on lower Falls, (5 months)	555 05
" sundry miscellaneous expenses incurred during same time	142 80
" painting Gay-street bridge	243 80
" hose and attachments at drawbridge	32 33
" lamps on Chase-street bridge	88 00
" office expenses, including rent	384 09
" engineering expenses for 1883	3,949 92
Total	$54,095 62

Amount brought forward		$54,095 62
Add cost of right of way paid by Comptroller's office		5,801 70
Total expenses of all kinds during year.		$59,897 32

Statement of Cost Balanced by Voucher Account.

Total gross amount of vouchers issued 1883, including pay-rolls, engineering, and miscellaneous vouchers		$52,900 56
Outlay, represented by wear and tear on plant during the year:		
Estimate value at beginning of year	$8,058 06	
Estimate value at present year	6,839 80	
Balance	$1,218 26	$1,218 26
Total outlay		$54,118 82
Less amounts received from sale of old junk, and paid over in cash		23 20
See preceding table, net outlay		$54,095 62
Adding to this, cost of right of way		5,801 70
We have as before		$59,897 32

Inventory of Equipment on hand at this date.

Estimated present value:

Equipment Gang No. 1	$1,190 00
" " 2	2,918 80
" " 3	2,542 00
Total	$6,650 80
Value of lumber on hand	189 00
Grand Total	$6,839 80

The amount of money paid to men employed on the new support walls, since they were placed under my charge, and since they have been built by day's work, is $77,019.88.

CONDITION OF BRIDGES.

I have had within the past month every bridge built under my administration thoroughly inspected with the following results:

Drawbridge.—Bridge turning-gear and hydraulic engine are in excellent order. The western abutment seems to have moved slightly in toward the bridge, and caused a binding which was relieved by taking off a piece of the facing-plank. Should this movement ever become serious, we could anchor the abutment back into the street. This bridge was repainted last year as to the portion above the floor. It requires now scraping and repainting underneath for the preservation of the iron-work, which should be done as soon as the weather will permit.

Pratt-Street Bridge.—In excellent order; water stands on the centre top chord, which I will have drilled, so as to drain properly. Gutters are very filthy and require more frequent cleaning.

Gay-Street Bridge.—In good order throughout. Gutters require more constant cleaning. I might as well say here that the floor of this bridge and Pratt-street bridge should be cleaned regularly once a week by the Street-Cleaning Department; it would take but little time; the gutters get so loaded with mud that it piles up against the bottom chord plates, and the water cannot drain off.

Chase-Street Bridge.—The western span is in excellent order. The eastern span being right over the engine-house of the Northern Central Railway, continues to suffer somewhat, notwithstanding the boxing, from the constant discharging of coal gases from the locomotives below. This entire bridge should be scraped and repainted as soon as the weather will permit.

North-Street Bridge.—In excellent condition.

Calvert-Street Bridge.—The iron-work of this bridge is in good condition; the asphalt floor will be resurfaced in the spring by A. L. Barber & Co., of Washington, who laid it. It would have been done this fall, but when Marsh Market Space was finished the season was too far advanced. I hope the recent disgraceful mutilation of the lions can be repaired, as I believe it can.

St. Paul-Street Bridge.—I have been somewhat anxious as to the effect of the coal gases upon the

iron-work of the long span, but, upon examination, found none of importance, and the entire structure seems to be in excellent condition. The cracks in the asphalt floor have again opened with the advent of cold weather, and will have to remain until spring, when we will have them repaired. The only trouble about the sheet asphalt on iron is the expansion and contraction of the iron which cracks the asphalt.

In relation to the other bridges along the Falls, although I have not critically examined them, I believe those below Charles street to be amply strong for any ordinary traffic. It is true, the floors are of wood, and require periodical renewal, but the spans are short. It might be possible to use one thickness of plank, say three (3) inches, and then cover with a layer of asphalt, but it would be, I think, questionable wisdom. The best plan is to let them remain as they are, and if in the future any are replaced by new bridges, to lay granite floors, which are the only things for the down-town heavy traffic.

This brings me to the other bridges now standing within the city limits, comprising Charles, Decker and North avenue, all of which require attention.

To effect this, the scope of the improvement and the powers of the Commission should extend to the city limits. Why any portion of the bed of the Falls within the city limits should not have its share of the expenditures of a fund for which the whole city is taxed, is difficult to comprehend. The truth is, that the flood of 1868, which led to the appropriation, did most damage on the lower Falls, and as the city had not then extended so much to the northward, the

interests of that locality were overlooked. In case this extension to the city limits should be obtained, Charles-street bridge should be replaced with a more suitable structure, paved with granite, as it is a most important thoroughfare. Decker street might remain for the present, but North-avenue bridge should be remodeled so as to provide a handsome, durable, iron structure, with a permanent floor. The greater portion of North-avenue bridge is of wood, and the great extent of its wooden floor makes it expensive and unsatisfactory to keep in repair, beside its liability to fire. I would also suggest that the trusses of the Charles-street and North-avenue bridges might be utilized in the rebuilding of Harman's bridge. The work which presses for immediate attention during the coming year is the completion of the support-walls on the lower Falls to a point about one hundred and fifty (150) feet below Fayette-street bridge, the condemnation for which is in progress; the building of Biddle-street bridge, and the construction of a low support-wall along the south bank of the Falls from North-street bridge to Charles-street bridge, and, if in connection with the right of way for the wall, the property from North street to Lovegrove alley, and between Hoffman street and the Falls, could be obtained, it could be made beautiful and attractive, and add much to the looks of the locality.

Before closing I must mention a matter which should be corrected at once, and to which the rebuilding of the wall back of Harrison street has directed my attention, viz.: that the residents on that side of Harrison street deposit all of their garbage *in the Falls*. The magnitude of this nuisance can only be known to those who

work in the midst of it. Why should they not be made to place their garbage in proper boxes on Harrison street, where the carts can collect it? That portion of the Falls between Gay and Fayette streets may be said to contribute more filth to the stream at present than any other section. The overhanging galleries, numerous outhouses, as well as kitchens, contribute a perpetual stream of offal, which should be otherwise disposed of.

I herewith submit a profile of North street from the water front to North-street bridge. It may be of interest in connection with the possible improvement of North street as a north and south thoroughfare. I believe the Northern Central Railroad are contemplating the removal of their freight business to the east side of North street and the erection of large sheds for the same. This, with their privilege of flooring over the Falls, would give them the whole valley between North and Buren streets, and Centre and Eager streets, with the exception of a few pieces of property. It is stated that the present freight depot is to be turned over to the Baltimore and Potomac Railroad. In this readjustment of traffic the recovery of North street for a public highway might possibly be secured. The subject is at least worth some consideration.

Before leaving the subject of North street, I repeat the recommendation that a viaduct be constructed on Madison street, reaching from Hargrove alley to some proper point east of Buren street, by which street traffic can cross the rapidly increasing net-work of tracks on North street with something like safety.

In conclusion, I submit a statement shewing the present condition of the Jones' Falls Improvement Fund.

Amount of 6 per cent. stock issued	$800,000 00
" 5 " "	957,000 00
Total	$1,757,000 00
Total loan authorized	2,500,000 00
Balance to be issued	$743,000 00
Cash in hand	33,070 00
Total available fund	$776,070 00

I herewith enclose (1), Inventory of tools and equipment; (2), Profile of North street.

Respectfully submitted,

C. H. LATROBE,
Engineer Jones' Falls Commission.

THE

ANNUAL REPORT

OF THE

BOARD OF TRUSTEES

OF THE

McDonogh Educational Fund

AND INSTITUTE,

AND THE

CATALOGUE

OF

McDonogh School,

(Post Office, McDonogh, Baltimore County, Maryland.)

JANUARY, 1884.

TRUSTEES AND OFFICERS

OF THE

McDonogh Educational Fund and Institute.

1883-84.

	Office.	Residence.
Wm. A. Stewart	44 N. Charles street	133 Lanvale street.
H. Clay Dallam	51½ St. Paul street	269 N. Eutaw street.
Robert T. Baldwin	Nat'l Mechanics' Bank	335 Madison avenue.
Samuel H. Tagart	43 Lexington street	84 W. Madison street.
David L. Bartlett	24 Light street	57 Hollins street.
German H. Hunt	7 German street	192 McCulloh street.
Charles H. Mercer	14 S. Gay street	328 E. Baltimore street.

PRESIDENT:

SAMUEL H. TAGART.

Vice-President:

WILLIAM A. STEWART.

Secretary and Agent:

H. CLAY DALLAM.

Finance Committee:

SAMUEL H. TAGART,
DAVID L. BARTLETT,
ROBERT T. BALDWIN.

REPORT.

OFFICE OF BOARD OF TRUSTEES OF McDONOGH
EDUCATIONAL FUND AND INSTITUTE.
BALTIMORE, *January 1st, 1884.*

To the Honorable, the Mayor and
City Council of Baltimore:

GENTLEMEN:

Another year has passed in the history of our School and left us more than ever impressed with the great blessing conferred upon the poor boys of our city by the munificence of Mr. McDonogh. We have, from the time of our organization, shown our appreciation of the great benefit of this bounty by an economical and useful dispensation of its proceeds. This course is prompted not only by our sense of duty, but with the knowledge that it is the only mode to encourage other benefactors who may be disposed to contribute their means in aid of so laudable a work. There is no diminution in the number of applications for admission, who are doomed to disappointment, as vacancies are very rare, and no increase is contemplated until the school buildings are completed. We can only reiterate our regret so often expressed that the growth of the School is not commensurate with its reputation. We feel the unremitting pressure, but are powerless to remedy it in our present condition. We are now waiting very impatiently for an

accumulation of income sufficient to finish our school buildings, so very important to proper teaching, and the comfort of the boys. So soon as this is accomplished, all future excess from the fund will be applied in an increase of the School to the full extent of such excess. In compliance with the ordinance creating this Board we uniformly submit with our report a financial statement of the condition of our fund. It not only exhibits a correct list of all of the properties which constitute the fund, productive or otherwise, but shows in detail the various objects and purposes to which the revenue from it is applied. The wisdom of the City Council in its requirement that every year the Board shall put them in possession of such statements, has ever met the sanction of the Board as being the strongest check against any infringement of the fund. Upon an inspection of the report of the "Finance Committee," submitted with our report, you will perceive that the present value of the trust is nine hundred and thirty-eight thousand, nine hundred and forty dollars and nineteen cents. The amount of the fund as reported by us the year preceding was nine hundred and twenty-three thousand, three hundred and seventy-five dollars and thirty-two cents, being an addition to the trust of fifteen thousand, five hundred and sixty-four dollars and eighty-seven cents during the past year. In estimating the amount and value of the fund, we embrace (except the Louisiana property) the unproductive property of every kind, a considerable portion of which not only produces no revenue, but on the contrary is a present burden. As appears by the financial report our income from city stocks amounts to $38,900, which not only maintains the School but supplies every other demand incident to the trust, and which are enumerated under the head of disbursements. It was from the saving from this

income that we have expended one hundred thousand dollars in the erection of our new buildings, and with which we will have to complete and furnish them. This has been not only accomplished without any stint upon the requirements of the School, but on the contrary every demand made by the Faculty as necessary or proper for its advancement has been gratified. As we are informed by the Principal in his report there has been added at the School during the past year a printing press, which has proved to be a valuable adjunct to their instruction. It is in a small and very inexpensive way, but may lead to large results. This small press has furnished the means of establishing a weekly newspaper of small dimensions, but large enough to supply all the notable incidents which occur at the School, which accomplishes its object. The editors and its contributors are members of the School, and have succeeded by their unaided efforts in creating an unusual interest in its success. It was established by the Faculty as the best means to improve the epistolary style of the boys, a very important element in their education. We have alluded to it to show, that nothing is omitted which tends to the promotion of the future usefulness of the boys in the system which prevails in our Institution. We herewith submit the annual report of the Principal made to the Board. As usual, it contains a very full and clear description of the work and operations of the School for the past year, and its perusal will afford much information to all interested in, or connected in any manner with, the School. It is gratifying to know of its steady progress, and see that the efforts made by the Faculty to render their studies a pleasure to the boys has been successful, as is evidenced by their attachment to both the School and their instructors. Very much more can, and will be accomplished in this direction could we

ensure a better preparation of the candidates for admission into the School. As low as the qualifications are, (and which were purposely so established to throw open the door to all, even of the most moderate capacity) yet are they much too high for the admission of many applicants. This in most cases is not attributable to natural incapacity, but to the want of a proper training and preparation of the candidate for admission. Mothers and friends who present their children for admission very naturally think they are qualified for any position they desire. When the test of a competitive examination is applied and failure the result, they awake from their delusion only to be overwhelmed with bitter disappointment. The orphan boy having in all other respects the strongest claim upon this charity is thus deprived of its benefits, for want of some care and attention to his preparation. In many cases the rejection of the boy thus unprepared, is more merciful than his admission. From the moment of his entrance into the school, unfitted and unprepared, he is overloaded, and totters under his heavy burden through his whole course, finishing with an ill digested store of knowledge difficult to utilize. This negligence of an ordinary preparation is the great and only impediment to even a greater success of our school, and a source of constant solicitude to the Board. The standard of admission requires a knowledge of the merest rudiments, and there has been no change in it since the School was inaugurated, or any elevation, except that produced by the skillful teaching and training by the Faculty. If the recommendations of the Board upon this subject were adopted, and acted on by the applicants, it would confer inestimable benefit upon them, and be of incalculable advantage to the School. The difficulty lays in our inability to reach the class who

are interested, or much of this evil might be avoided upon the simple ground of their own interest. Our reports being properly limited to a few hundred, are confined in their circulation, and read (if read at all) by those who feel some interest in the general subject of education. "We would not wound where we seek to heal," but the gravity of this subject, and its importance to those who are entitled to our best offices, justifies and requires the greatest publicity of this evil, that the corrective may be applied. The Farm has perceptibly improved in appearance and value under the management of the present Superintendent. From his experience and reputation as a farmer, he will no doubt verify our predictions of its pecuniary success during the next few years. The Principal has reported to us continued good health, for which blessing we unite with him in giving thanks to the Giver of all good.

Very respectfully,

S. H. TAGART,
President.

Test: H. Clay Dallam,
Secretary and Agent.

Report of the Finance Committee.

BALTIMORE, *January 1st, 1884.*

To the Trustees of the McDonogh
Educational Fund and Institute.

GENTLEMEN:

The following is a statement of Receipts and Disbursements from January 1st, to December 31st, 1883:

RECEIPTS:

Cash on hand, as shown by last report		$ 2,728 81
For interest on City Stocks		38,900 00
" Sales of Live Stock		475 00
		$42,103 81

DISBURSEMENTS:

For Account of New School Buildings	$ 597 61		
" Additions to Library and School Apparatus	238 60		
" " Farm Implements	400 00		
" Printing Press	500 00		
" Improvements to the Farm	591 84		
" Repairs to Buildings	435 04		
" Printing Report and Catalogue for 1882	107 00		
" W. Md. R. R. Transportation	20 12		
" Taxes and Expenses on Property in New Orleans	594 80		
" Account Loans from National Mechanics' Bank	16,500 00		
" Interest on Loans	1,466 84		
" Miscellaneous Expenses	324 84		
		$21,776 69	
For Expenses of Tuition	$3,686 06		
" " House and Lodging	3,496 11		
" " Subsistence	7,928 71		
" " Clothing	2,305 15		
" Medical Attendance	306 47		
" Office Stationery	128 35		
" Expenses of the Trust	2,300 00		
		20,150 85	
			41,927 54
Balance of Cash on hand			$ 176 27

The investments are as follows:

Six Per Cent. Stock of Baltimore City.

"Defence Loan" of 1893.

Interest payable semi-annually, March 1st and Sept. 1st	$210,000 00

"Exempt Loan" of 1893.

Interest payable semi-annually, March 1st and Sept. 1st	70,000 00

"Funding Loan" of 1900.

Interest payable quarterly, January 1st, April 1st, July 1st, October 1st	85,000 00

Five Per Cent. Stock of Baltimore City of 1916.

Interest payable semi-annually, May 1st and November 1st	310,000 00

Five Per Cent. Stock of Baltimore City of 1900.

Interest payable quarterly, Feb. May, Aug. and Nov	30,000 00
Productive Investments	$705,000 00

To which add:

Real Estate—McDonogh Farm and Improvements		127,500 00
Payments on account of Real Estate in Louisiana		4,085 67
New School Buildings		100,078 25
Personal, viz:		
Live Stock	$7,200 00	
Household Furniture and Material	3,500 00	
Library, Furniture and Instruments	1,500 00	
Farming Implements	2,400 00	
		14,600 00
Amount of Cash on hand		176 27
		$951,440 19
From which deduct:		
Amount due National Mechanics' Bank		12,500 00
Present value of the Trust		$938,940 19

In addition to the Real Estate, Stocks, &c., already enumerated, the Trust owns the following properties, viz:

1st. A tract of about..... ..... 3,000 Acres
of heavily timbered land lying about 96 miles north of New Orleans on the west bank of the Mississippi, and about two miles from the river. It is situated in the Parish of Iberville, about three or four miles from Bayou Goula, which is the seat of the Parish. There are no improvements of any considerable value on the tract. Before the war this property was esteemed very valuable, and the Board of Trustees which preceded the present Board, made a contract for the sale of 1,300 acres of the tract at $73,000. This was the year before the war began, and during the war the purchaser made default, and Baltimore had to take the property back.

2d. A tract of..... .....10,000 Acres
about fifty-five miles north of New Orleans, on the eastern bank of the Mississippi, situated in the Parish of St. James.

In 1859 the joint Commissioners, who made the partition between New Orleans and Baltimore, appraised this property at $75,000, and it was charged to Baltimore at that appraisement.

In the report of the former agents (A. D. 1860) they, however, spoke of this tract as "low swamp land probably of no great value."

3d. A one-half undivided interest with New Orleans to 177 Arpents of land lying in the rear of the City of New Orleans, known as the "Livaudais Tract." The partition of this tract has never been made so as to definitely ascertain the respective rights of the parties in and to the same, and the suit is still pending in regard to it. It is alleged New Orleans holds possession of a portion of this which rightfully belongs to Baltimore. 88½ Arpents

4th. A small tract in the rear of Versailles, Parish of St. Bernard and Orleans, bought in by Baltimore under a judgment in its favor, at $280.00.

5th. A tract of..... 640 Acres
in the Parish of Livingston, La. It was the property of Mr. St. Martin, a debtor to Baltimore, and was sold under execution and bought in by Baltimore for $640.00.

6th. 185 squares of ground in the rear of Versailles, Parish of St. Bernard, sold in 1859 to W. Dunbar for $2,000.00, but not paid for.

7th. Twenty-four certain lots of ground situate in the city of New Orleans in square known as Number 370, bounded by Toulouse, White, St. Peter and Duprez streets, said property having been bought in by Baltimore at a tax sale, 5th of October, A. D. 1875, for $138.85, it having been sold for payment of taxes due by J. O. Theard, a debtor to Baltimore. Property assessed at $2,000.00.

8th. The "Fassman" lots, situate in square Number 753, New Orleans, bounded by Scott, Pierre, Bank of Palmyra; assessed at $1,200.00.

7 and 8 are of little value.

9th. 17 Certificates of Location for.....2,149.15 Acres.

The books of account containing the various items embraced in the foregoing statements, were duly balanced on 31st ultimo, and the Committee now present for your examination a Balance Sheet of the Trust Ledger, showing the investments of the Trust Funds on January 1st, 1884.

Dr. Balance Sheet. *Cr.*

City Stocks.....	$705,000 00	Nat'l Mechanics Bank..	$ 12,500 00
Real Estate—McDonogh Farm.....	127,500 00	McDonogh Trust Fund,	938,940 19
Real Estate—New Orleans.....	4,085 67		
New School Buildings...	100,078 25		
Live Stock on Farm.....	7,200 00		
Household Furniture.....	3,500 00		
Library & Instruments,	1,500 00		
Farming Implements....	2,400 00		
Cash	176 27		
	$951,440 19		$951,440 19

Respectfully submitted,

S. H. TAGART,
D. L. BARTLETT,
ROBERT T. BALDWIN,
Finance Committee.

STATE OF MARYLAND, *City of Baltimore, sct:*

I hereby certify that on this 2d day of January, A. D. 1884, personally appeared before me, a Justice of the Peace, in and for the city and State aforesaid, Samuel H. Tagart, President of the Board of Trustees of the McDonogh Educational Fund and Institute; H. Clay Dallam, the Agent and Secretary thereof, and Robert T. Baldwin, one of the Trustees thereof, and did each make oath, in due form of law, that the matters stated in the foregoing Reports are true, to the best of their knowledge and belief.

Sworn before GEO. McCAFFRAY,
Justice of the Peace.

Report of the Principal.

McDonogh School, *January 1st, 1884.*

To the Trustees of the
McDonogh Educational Fund and Institute:

Gentlemen: The McDonogh School has completed the first decade of its history. The doubts and difficulties which beset our pathway at first have disappeared, and our progress has been steady and real.

Among the questions which presented themselves at the outset were such as these: Is there room for a new school for poor boys in a community so amply supplied as Baltimore with all kinds of educational facilities? Can material be obtained on which it will be worth while to expend first class teaching and the best aids to teaching? Can the public, including the parents and guardians of the boys, be made to esteem the school so highly as to prevent interference with its training by withdrawing pupils or otherwise? Can such a rigid system of discipline be maintained as shall best fit youths for that struggle of life which, for the most part, they must undertake unaided? Or, if such a system of discipline be set up, will pupils, whose connection with the school is voluntary, acquiesce in it with that cheerfulness and promptness which

are necessary to success? Can a high tone be developed and maintained, while, at the same time, many of the scholars shall not imbibe a distaste for the humbler avocations to which they are destined?

That our experience has satisfactorily answered these and such like questions, the following facts would seem to indicate. Without any advertising or effort to attract attention, the number of candidates for admission to the school has steadily increased until it is now many fold as great as our capacity. The improvement in the character of the material offered has been as steady as in the amount. At first, the candidates were heterogeneous, and a considerable amount of thinning out had to be done after admission. Now, the number of candidates, and the care exercised in making appointments, ensures us as good material as can be found in the best private schools. Last summer, after the sifting by your Educational Committee, thirty-four candidates appeared at the competitive examination which was kindly conducted for us by Prof. H. A. Wise, City Supt. of Schools, and Prof. W. F. Wardenberg, Principal of the Eastern Female High School. From these candidates the eight standing highest were appointed to the vacancies then existing. All disposition to interfere with the régime of the school, or to withdraw boys before we thought it best for them to go, disappeared long since. Our scholars are held here by no other authority or inducement than the value of their places in the school. No obstacle is interposed to prevent the withdrawal by friends, or by the scholar himself, except that in such cases the scholar loses his place and cannot again resume it. We have even found it expedient to replace the appointments which at first covered the whole term of residence by annual ones, so that while eligibility continues until the boy has reached his sixteenth, or, in some cases, his

seventeenth year, he must, nevertheless, secure his re-appointment annually by satisfactory diligence and deportment. As the result of this policy we now lose no pupils before it is time for them to go, and the annual re-appointments are as eagerly sought after as the entrance appointments of new boys. Nor is this result due to a reduction in the study requirements, or to any relaxation of discipline. Our standard in these respects has been raised instead of lowered as the school has become more thoroughly organized. The programme of study is as extensive as is consistent with thorough drilling, and admits of no time for waste or idleness. More important still has been considered the exacting discipline by which we seek to give strength, manliness, and self-reliance of character to those who will have to fight their own way in the world. It is too soon to measure fully the effects of our training by the subsequent careers of our pupils. The oldest scholar ever in the McDonogh School has barely reached his twenty-fifth year. But that a very large percentage of our boys have entered earnestly and creditably upon work, promises well. There have been some failures, but these have been few, and the general impression made has been such that, not only has the pressure for the entrance of foundationers greatly increased, but there has arisen a growing number of applications from gentlemen of means and influence for the admission of their sons as pay scholars into the school.

During this period of the organization and early growth of the school, its material interests have prospered under the wise management of your Board. Besides equipping and carrying on the school and paying off a heavy claim against the estate, some $150,000 of income have been expended in buildings and improvements. Our permanent buildings are now more

than two-thirds completed. The property on which the school is located is in much better condition than when acquired. At the same time the permanent endowment fund has grown from $681,333⅓ to $705,000, while the entire debts due and unpaid are less than $15,000.

We have reached a point where it seems to me wise to take measures for the early enlargement of the school. I therefore respectfully renew the recommendations made one year ago.

1. That the buildings be completed as speedily as is consistent with solidity and economy. The operations of the school could be more efficiently and economically carried on in the completed buildings than scattered as they now are. This step seems preliminary to any considerable increase in the number of scholars. To complete the buildings it will not be necessary to increase the debt beyond $50,000, a sum which can be paid in a few years from surplus revenue, if it be still found undesirable to sell the real estate in Louisiana.

2. That the number of scholars be gradually increased from year to year, beginning with the next scholastic year. It will be better, whenever the school is enlarged, to do so gradually, rather than derange its organization and course of instruction by suddenly doubling its numbers. Hence it appears to me wiser to distribute the increase over five or six years, than to put it all at, say, three years off. An increase of ten boys per annum would, in five years, enlarge the school to one hundred boys, while the surplus revenue of those same years would liquidate the debt. Should anything meantime be realized from the Louisiana property, the numbers could be increased more rapidly.

3. That a class of not more than ten non-foundationers or pay boys be admitted next year upon such terms as the Board

may prescribe. The new building gives us, for the first time, the room necessary for this purpose, and the period seems to be at hand when we may try the experiment of admitting other boys to the school besides those on the foundation. The admission of such boys could be made to add to the revenues available for beneficiary purposes, while the experience of many of the great English schools shows the advantages within reach of the Institution by the adoption of such a policy.

Next in importance to the matters just presented is that of technical instruction. So far, our facilities in this direction have been confined to farm and garden work. This kind of work has proved most useful for purposes of discipline and in promoting healthy physical development, but its value as an introduction to future employment is little, in the case of city boys, not three per cent. of whom will ever be farmers or gardeners. Our boys average, perhaps, an hour's manual labor per day during the school term; they average some six or eight hours work per day during the two months of summer. This amount of time spent in a work-shop, under careful and competent instruction, would, in the three years from thirteen to sixteen, give many boys a good foundation on which to build afterwards. Thus, in addition to the advantages of the present farm work, shop work would have the additional one of preparation for some kind of skilled labor.

During the past six months the first step in this direction has been taken by the establishment of a printing office for the boys, from which they issue a little paper called "The Week." The principal object of this publication is not of course the mere printing of it, but it affords to the six or eight boys who do the type setting and press work an introduction

to the printer's trade which they may be able to turn to valuable account hereafter. The paper has proved especially useful to the boys in developing and improving the power of expressing themselves in simple, clear, and correct language. As a chronicle of school life and a means of communication with former scholars it has also served a pleasant and desirable purpose. The setting on foot of this valuable addition to our teaching equipment was due to the zeal and energy of Messrs. Lyle and Johnson, to whose labor and care has also been due its subsequent success.

It is to be hoped that the generous bequest of Dr. Barnum may soon enable us to put the technical instruction upon an adequate basis.

At the beginning of the past year the class rooms in the new building became available and the teaching department was transferred to it. The new dormitories had been occupied some months before. The boarding department, laundry and infirmary remain in the old building. The new quarters have added greatly to the comfort of the officers and scholars, and to the efficiency of the school work.

Mr. H. L. Gantt, desiring to complete his studies for the profession of Mechanical Engineering at the Stevens Institute, resigned his position on the first of August. He carried with him the best wishes of all connected with the school. He had been connected with it from the outset, and, in every capacity, both as scholar and teacher, had won the respect and esteem which always follow high character combined with earnest, intelligent devotion to duty. Mr. W. J. Witzenbacher, who had just taken his degree of A. B. at the Johns Hopkins University, was appointed to fill the vacancy, and has shown himself faithful and energetic in the performance of his duties.

The Rev. W. S. Jones, of St. Thomas' Parish, held service regularly on Sunday afternoons at the school during the past year. The Rev. A. M. Jelly, of New Windsor, preached for us on one occasion. On Sunday forenoon a sermon or other suitable matter was read, or a talk by the Principal occupied the hour usually devoted to religious service.

The course of lectures inaugurated some years ago through the kindness of gentlemen connected with the Johns Hopkins University, was continued in the past year by the officers of the school. A number of lectures were delivered by the Principal and by Messrs. Gantt and Johnson. We are indebted to Col. Wm. Norris for some pleasant and instructive readings.

On the occasion of our last Commencement in June, Judge C. E. Phelps delivered an admirable address to an audience which crowded the hall to overflowing. After the usual exercises on that day a prize for excellence in reading was awarded by a committee of gentlemen present. There were three contestants, and the prize—a handsome book—was presented by Gen. Taylor, the chairman of the committee, to Master E. R. Allen.

The 21st of November, the anniversary of the opening of the school, was observed in the usual way. The exercises of this, the tenth anniversary, were held for the first time in the new building. Judge H. Clay Dallam selected this occasion for conferring a fine box of drawing instruments upon the writer of the best contribution to "The Week" during the preceding two months. The committee to whom he referred the matter decided in favor of Master C. F. Grafflin, to whom, at Judge Dallam's request, the prize was presented by R. G. Keene, Esq., with appropriate remarks. Short addresses were

made to the school by the Hon. F. P. Stevens, the Rev. Dr. A. M. Courtenay, and Messrs. S. A. Stevens, S. H. Tagart, G. H. Hunt, and Judge H. C. Dallam.

Last Spring, Mr. Clousher, having reclaimed a piece of swamp land of about one and three-quarter acres in extent, offered, with my approval, to give one dollar per barrel for all of the corn which a club of ten boys would raise upon it, the farm hands to put it in order, and the boys to plant, work, and gather the crop in their spare time. The ten boys who volunteered to undertake it were Masters Chase, Leamy, Ditman, Russell, Henry, Black, Delphey, Jones, Johnson and Sheffer. The crop amounted to twenty-three barrels, entitling each boy to $2.30.

The farm and garden are more productive than ever before. The garden, under Mr. Finley's care, supplied us last year with an abundance of vegetables and of small fruits, while a considerable quantity of cherries, apples and peaches were obtained from the orchards now coming into bearing. Mr. Clousher has displayed great energy and good judgment in improving the farm and developing its resources.

My acknowledgments are due to my associates and to Mrs. Young for the zealous and efficient manner in which they have discharged their duties.

The past year has been marked by an exemption from sickness and accident rare even in our experience. For this and all other blessings our heartfelt gratitude is due to a gracious Providence.

Respectfully submitted,

W. ALLAN,
Principal.

CATALOGUE

OF

McDONOGH SCHOOL.

Principal:

WILLIAM ALLAN, M. A.

Instructors:

D. C. LYLE, M. A.

H. L. GANTT, A. B.

J. JOHNSON, JR., A. B.

C. H. SUMWALT (*Music and Drawing.*)

Matron:

MRS. JOSEPHA YOUNG.

Origin of the School.

The McDonogh School was founded in accordance with one of the provisions of the will of John McDonogh, a wealthy merchant of New Orleans, who at his death in 1850 left his entire estate of $1,400,000 to charitable purposes. He divided the bulk of his property between Baltimore, his native city, and New Orleans, the city of his adoption. The portion given to Baltimore was devoted to the establishment of the McDonogh School on a large estate near the city. This foundation is designed primarily for the benefit of poor boys of the city of Baltimore. Those admitted on the foundation have no fees of any kind to pay, the entire expense of their maintenance being borne by the school.

Admission of Scholars.—The following paragraphs, taken from the report of a committee appointed by the Board of Trustees to prepare a general plan for the organization of the school, set forth the rule of action that has guided the Board in making the appointments of scholars.

"It is suggested that pupils be admitted between the ages of ten and fourteen.

"The description of boys proposed to be taken may be defined as poor boys, of good character, of respectable associations in life, residents of the city of Baltimore.

"By 'poor' are meant those who are without adequate means for their maintenance, or who, in consequence of their indigent condition, are withdrawn from the public schools before acquiring a sufficient degree of education.

"By 'respectable associations in life,' it is intended to designate those whose parents or guardians may be expected

to duly appreciate the advantages of education and of moral and physical training."

Appointments are made for the current scholastic year only, all of them terminating on the 1st of June next succeeding the date of entrance. Boys who improve their opportunities are eligible for reappointment at the end of that time.

Number of Scholars.—At the close of the session of 1881–'82, 50 boys were present, and 12 were appointed during the following school year. Of these 62 boys, 7 were honorably discharged because they had completed their term of residence, 2 were withdrawn, 2 were not reappointed, and 2 left without permission. There were thus 49 boys present at the close of the session of 1882–'83. Their names and standing are given below.

Register of Scholars.

The "Standing" is the average mark for the whole session of ten months, and is estimated with reference to 100 as the maximum.

FIRST CLASS.

GRADE.	NAMES.	STANDING.
1	ATWOOD, ALBERT HAMMOND	82
2	HENRY, WILLIAM COLTMAN	81

SECOND CLASS.

GRADE.	NAMES.	STANDING.
1	*LANIER, CHARLES DAY	82
2	TAYLOR, FRANK WILHELM	81
3	JOHNSON, ERNEST HEMSLEY	75
4	MIDDLEKAUFF, WILLIAM EMANUEL	74
5	ROGERS, HARRY	72
6	MILLER, WILLIAM HAMAN	70
7	MILLER, WILLIAM ELLIOTT	67
8	DIAMOND, WALTER GORMLEY	66.3
9	RISTON, JAMES PRESTON	66
10	BROWN, GEORGE RUSSELL	62

*Promoted from the Third Class at the beginning of the year.

THIRD CLASS.

GRADE.	NAMES.	STANDING.
1	RUSSELL, ALLEN TRAVES	85
2	DANNELLY, CHARLES OTIS	81
3	CHASE, WILLIAM FLOYD	78.2
4	BIGGIN, FREDERICK CHILDS	78
5	LEAMY, EUGENE	75
6	SCHUTZ, JOHN LAWRENCE	74
7	RICHARD AUGUSTUS CLAUDE	71
8	LEWIS, ROBERT PROUD	68
9	FAIRBANK, DAVID CHURCH	63
10	STRONG, HARRY CLINTON	62.6
11	DUVALL, JAMES BIRCH	62

FOURTH CLAS .

GRADE.	NAMES.	STANDING.
1	FRANKLIN, BENJAMIN ALVEY	81
2	SHEFFER, JOHN WILLIAM	78
3	JONES, RUSSELL AUBREY	76
4	SMITH, JAMES VERNAY	75
5	MARSH, WILLIAM LEE	74
6	GANTT, CHARLES STEUART	73.8
7	HALL, AMHERST BELCHER	73.5
8	CRIST, GEORGE EDWARD	73.3
9	BLACK, SAMUEL SUTTON	73
10	MCVEIGH, EDWARD WARREN RATCLIFFE	72.5
11	EVANS, CHARLES AMOS	68
12	CROOK, HENRY WALLIS	67
13	LANDRETH, CLARENCE PATTERSON	66
14	NASON, ROBERT LAUTENBACH	65
15	DITMAN, NELSON GIBSON	61

FIFTH CLASS.

GRADE.	NAMES.	STANDING.
1	GRAFFLIN, CHARLES FREDERICK	89
2	KERLINGER, JOSEPH HENRY	83
3	ALLEN, EDWARD REUBEN	82
4	COOK, JOSEPH GUILD	77
5	HAUER, DANIEL JACOB	76
6	TAYLOR, GEORGE EDWARD MARSHALL	75.5
7	DELPHEY, CHARLES DUHURST	73
8	SELBY, JAMES LEE	57
9	MCCAW, THOMAS DEGRAFFINREAD	56
10	BROOKS, WALTER LITTELL	55
11	FERGUSSON, ALAN ROBB	54.5

Prizes.—A *Certificate of Distinction* is conferred at the close of each half session of the school upon every boy whose mark on the examination and final standing are each 80 per cent. or more in any three of his studies—one certificate being given for each group of three studies in which the requisite 80 per cent. is made. But in awarding these certificates, Spelling, Reading, Writing, Drawing (in the Third or Fourth Class), and Declamation, are counted as one study each; while English, Geography, German, History, Physiology (in the Third Class), Botany, Drawing (in the First or Second Class), Book-Keeping, Physiology, Chemistry, Physics, and Mechanics are counted as two studies each; and Mathematics is counted as three studies.

A *Certificate of Special Distinction* is conferred upon each boy who obtains two or more Certificates of Distinction, if his grade is not below 60 per cent. in any one of his studies.

Certificates of Distinction were awarded in accordance with the above scheme to a respectable proportion of the boys, and were conferred by the Principal at the close of the examinations in January and in May.

Certificates of Special Distinction were won at the examinations in January by the following boys, who passed satisfactorily all their examinations and made distinguished attainments in the required number of studies:

First Class.—A. H. ATWOOD, W. C. HENRY.
Third Class.—A. T. RUSSELL.
Fourth Class.—B. A. FRANKLIN.
Fifth Class.—C. F. GRAFFLIN, J H. KERLINGER.

At the examinations in May, Certificates of Special Distinction were awarded to the following boys:

First Class.—A. H. ATWOOD.
Second Class.—C. D. LANIER, F. W. TAYLOR.

Third Class.—W. F. CHASE, A. T. RUSSELL.
Fourth Class.—S. S. BLACK, G. E. CRIST, B. A. FRANKLIN, A. B. HALL, R. A. JONES.
Fifth Class.—E. R. ALLEN, C. F. GRAFFLIN, J. H. KERLINGER.

Scholarships.—By resolution of the Board of Trustees the term during which boys may continue in the school expires when they reach the age of 16 years.

But to encourage a spirit of excellence and attention to duty, as well as to furnish still further advantages to those who are most worthy, the Board has established scholarships, which are conferred as prizes at the end of each session on those boys who, up to the age of 16 years, have best improved the opportunities afforded them at the school.

Recipients of these Scholarships are entitled to the privileges of the school for an additional year, and are required, in consideration thereof, to perform such extra duties as may be assigned to them.

In accordance with this action of the Board, a Prize Scholarship for the year 1883–'84 was conferred on

W. F. CHASE.

Debating Society.—At the beginning of the session of 1878–'79, a number of the older boys organized the Allan Debating Society. During the past session the exercises were conducted regularly and with spirit, and the Society offered two prizes to be competed for by the members; one for the best debater, the other for the best reader. On commencement day the president, E. H. Johnson, conferred the Debater's Prize upon

W. C. HENRY,

and the Reader's Prize upon

F. C. BIGGIN,

who had been chosen by the Society as the recipients of these honors.

Course of Instruction.—The school was divided into five classes.

The First Class (the highest) completed Magnus's Elementary Mechanics, and two-thirds of Peck's Mechanics; Wentworth's Algebra from quadratics through geometrical series; Bradbury's Geometry, from solid geometry to the end; Wentworth's Trigonometry; Church's Descriptive Geometry, from the beginning through shades and shadows; Davies' Analytical Geometry, through the parabola; read 100 pages of Freytag's Soll und Haben, and 90 pages of Adler's German Reader; finished Sheldon's German Grammar; and had exercises in mechanical drawing, English composition and music, daily throughout the year.

The Second Class completed Peck's Ganot's Physics; Morse's Elements of Zoölogy; Dunglinson's School Physiology; thirty selected pages of Packard's Our Common Insects; Wentworth's Algebra, from equations of the first degree through geometrical series; the first two books of Bradbury's Geometry; Bryant and Stratton's Book-Keeping; Doyle's History of the United States; read 120 pages of Otto's German Reader, and finished two-thirds of Sheldon's German Grammar; and had exercises in English Composition, mechanical drawing, and music daily throughout the year.

The Third Class completed Gray's How Plants Grow, with practice in the analysis of flowers; White's Arithmetic from discount to the end; Wentworth's Algebra, from the beginning to quadratics; Swinton's English Grammar; a part of Guyot's Grammar School Geography; Otto's Second Book in German, and 70 pages of Otto's German Reader; one-half of Sheldon's German Grammar; 50 pages of the second part of Harrington's Spelling Book; and had exercises in English composition, free-hand drawing, and music daily throughout the year.

The Fourth Class completed White's Arithmetic from interest to the end; Swinton's Language Lessons, and a part of Abbott's How to Tell the Parts of Speech; parts of Guyot's Grammar School Geography, and the Eclectic Intermediate Geography; 70 pages of Harrington's Spelling Book; 90 lessons in Otto's Second Book in German; and had exercises in English composition, reading, free-hand drawing, and music daily throughout the year.

The Fifth Class completed the Eclectic Primary Geography, the whole of the first part and 30 pages of the second part of Harrington's Spelling Book; White's Arithmetic to Partial Payments; and had exercises in reading, map drawing, and music throughout the year.

Text Books.—The following were used during the year: The Bible; Harrington's Spelling Book; Swinton's Language Lessons and English Grammar; Abbott's How to Tell the Parts of Speech; the Eclectic Series of Geographies; Guyot's Grammar School Geography; Doyle's History of the United States; Sheldon's German Grammar; Otto's Second Book in German; Otto's German Reader; Adler's German Reader; Freytag's Soll und Haben; Adler's and Whitney's German Dictionaries; Bryant and Stratton's Book-Keeping; Krüsi's Elementary and Synthetic Drawing Books; Walton's Arithmetical Cards; White's Complete Arithmetic; Ray's Test Examples in Arithmetic; Fish's Arithmetical Problems; Wentworth's Algebra; Bradbury's Geometry; Wentworth's Trigonometry; Davies' Analytical Geometry; Church's Descriptive Geometry; Peck's Elementary Mechanics; Peck's Ganot's Physics; Magnus's Elementary Mechanics; Morse's Elements of Zoölogy; Dunglinson's School Physiology; Packard's Our Common Insects; Gray's How Plants Grow.

School Library.—A library for the use of the scholars and officers of the school has been established. It now contains about 1812 volumes, which have in great part been selected with reference to furnishing the boys with pleasant and healthful reading. Other books will be added, from time to time, as means and opportunity permit.

Religious Instruction.—A chapel service is held every morning, and the exercises of the school are closed with sacred music. Rev. W. S. Jones holds regular services at the school every Sunday afternoon; on Sunday forenoon a sermon or other suitable matter is read, or a talk is given to the boys; and at night systematic instruction in the Bible is given to the classes, into which the school is, for this purpose, divided.

Military Tactics.—The school is organized into a military company, and regularly drilled, in good weather, about twenty minutes a day. Only the simpler evolutions of squad and company drill are taught, without arms. Four Sergeants and four Corporals are appointed each year, who not only have authority over the company while in ranks, but have considerable power and responsibility in the general management and discipline of the school. The officers during the past year were

A. H. ATWOOD, *First Sergeant*,
J. P. RISTON, *Second Sergeant*,
E. H. JOHNSON, *Third Sergeant*,
W. F. CHASE, *Fourth Sergeant*,
W. E. MIDDLEKAUFF, *First Corporal*,
J. P. SMITH, *Second Corporal*,
H. ROGERS, *Third Corporal*,
F. W. TAYLOR, *Fourth Corporal*.

Length of Session.—The school session opens on the second Monday in August, and closes on the first Saturday in June. It is divided into two terms, the second of which begins on the 1st of February.

Distribution of Daily Exercises.—The work of the day has been distributed as follows: The boys rise at 5:30, make up their beds, and put their rooms in order. At 6:30, chapel exercises for fifteen minutes; then a lecture of fifteen minutes by the Principal on the current news of the day. Breakfast at 7. At 7:40, recitations begin, and continue, with an intermission of fifteen minutes, until 1:15, at which time the school is dismissed with music, and the boys march out.

Dinner at 1:30. At 2:15, squad or company drill for twenty minutes. The remainder of the afternoon is given to play, or in busy seasons to outdoor work. Those boys, however, who fail on the morning's recitations, are required to devote a part of the afternoon to making up the deficiency.

Supper at 6:30. After supper the school library is opened and books are given out or returned. At 7:10, the preparation of lessons for the next day is begun, and is continued for an hour and fifty minutes. At 9:10 all the boys are required to be in bed.

Saturday is given to recreation or to work, according to circumstances.

Out Door Work.—During the session of the school, which extends over ten months in the year, the out-door work required of the boys is little, and is not allowed to interfere with school duties—the conviction being entertained that it would be unwise to require any considerable amount of manual labor of boys while their energies are fully occupied with study. The result of such a requirement would be to cripple the efficiency of the school without securing any compensating advantage. Yet during the session, there are many ways in which the boys aid in the current farm and garden work. A

certain amount of out door-work to be done in their play-time is the penalty attached to many minor offences, (not failures in recitation,) and takes the place of translations, or columns of words to be written, and the simple confinement, that constitute the usual penalties for such faults. In this way, almost every afternoon, a number of boys are required to work at tasks assigned them, for from one to two hours. In addition to this, in busy seasons, such as the time for corn-planting and corn-gathering, all the pupils are required to work on Saturdays, and sometimes in the afternoons. Such work, however is considered as extra, and is only imposed when it cannot be conveniently avoided.

For the months of June and July, covering the period most important as regards garden and farm work, school duties are suspended, and the boys are regularly employed out of doors. They work from seven in the morning till noon. They also work in the afternoon when harvest renders it necessary to keep the whole force at work all day.

Care is taken so to vary and arrange the work assigned as to familiarize each boy with all the more important operations on the farm and in the garden.

Furloughs and Visits.—Furloughs are given to all the boys for four or five days at Christmas to allow them to visit their homes or friends. A holiday varying in length from four to ten days, according to the standing of the boy during the preceding session, is also given at some time during the vacation months.

The afternoons of the first Saturday in April and the first Saturday in October are set apart for visits to the boys from their relatives and friends. At no other time are visits to the boys permitted.

Examinations.

In addition to special examinations in certain classes held at various times during the year, there are two general examinations for the whole school, one at the end of the first half-session, the other at the end of the school year.

The following are some of the examinations that were given in May, 1883.

FIRST CLASS.

ANALYTICAL GEOMETRY.

(*First* 129 *pages of Davies' Analytical Geometry. Time* 3 *hours.*)

1. Find the angle between two lines, and express the conditions that they should be perpendicular or parallel. Find the perpendicular distance from a point to a line. Prove that supplementary chords of a circle are at right angles.

2. Find the equation of the ellipse. Prove that every diameter of an ellipse is bisected at the centre. Find the ratio between corresponding ordinates of an ellipse and of a circumscribing circle.

TRIGONOMETRY.

(*All of Wentworth's Trigonometry. Time* 5 *hours.*)

1. Find A if cot A = tan nA. Derive all the functions of 45°, 30°, 60°. From the top of a hill the angles of depression of two successive milestones on a straight level road leading to the hill are observed to be 5° and 15°; find the height of the hill. Find the radius of a circle if a chord whose length is 5 subtends at the centre an angle equal to 133°. From a square whose side is equal to 1 the corners are cut away so as to leave a regular octagon; find the area of this octagon.

2. Set down the values of the sine, cosine, tangent, cotangent, of 0°, 90°, 180°, 270°, 360°. Given cot $x = -3$; find all the possible values of sin x, cos x, tan x. Express the first four functions of $(90° + x)$ and $(130° - x)$ in terms of the functions of x. What angles less than 360° have a sine equal $-\frac{1}{2}$? a tangent $= +\sqrt{3}$? Simplify cos $(180° + x)$ cos $(270 - y)$ − sin $(180° + x)$ sin $(270° - y)$. Represent by lines all the six functions of an angle greater than 90° and less than 180°. Develop sin $(x - y)$ and cos $(x - y)$ when x and y are acute.

3. Develop cos $(x + y)$ when x and y are acute, and show the development is true whatever may be the values of x and y. Find sine, cosine, tangent, and cotangent of half an angle in terms of functions of the angle.

Show how the other parts of a triangle may be found when two sides and the angle opposite one of them are given; show also when there will be two solutions, when one, and when none.

4. Deduce the values of the sine, cosine, and tangent of half any angle of a triangle in terms of the sides of the triangle. Find the area of a triangle in terms of two sides and the included angle; in terms of the three sides. Given $b = 3000.9$, $c = 1587.2$, $A = 84° 4' 4''$; find a, B, and C. Given $a = 111$, $b = 145$, $c = 40$, find A, B, C. Given a 60, $B = 40° 35' 12''$, area 12, find the radius of the inscribed circle.

GERMAN.

(100 *pages of Adler's Reader, and the last half of Sheldon's Grammar. Time 3 hours.*)

1. *Translate:*

Kaum seh' ich mich im ebnen Plan,
Flugs schlagen meine Doggen an,
Und bang beginnt das Ross zu keuchen,
Und bäumet sich und will nicht weichen;
Denn nahe liegt, zum Knäul geballt,
Des Feindes scheussliche Gestalt,
Und sonnet sich auf warmem Grunde.
Auf jagen ihn die flinken Hunde;
Doch wenden sie sich pfeilgeschwind,
Als es den Rachen gähnend theilet,
Und von sich haucht den gift'gen Wind,
Und winselnd wie der Schakal heulet.

Hinter den Sonnen ruhen Sonnen im letzten Blau, ihr fremder Strahl fliegt seit Jahrtausenden auf dem Wege zur kleinen Erde, aber er kommt nicht an. O, du sanfter, naher Gott, kaum thut ja der Menschengeist sein kleines, junges Auge auf, so strahlest du schon hinein, O Sonne der Sonnen und Geister!

Ein andermal erhandelten sie eine sehr schöne Venus von Elfenbein, die man unter die Meisterstücke des Praxiteles zählte. Sie war ungefähr fünf Fuss hoch und sollt' auf einen Altar der Liebesgöttin gestellt werden. Als sie angelangt war, gerieth ganz Abdera in Entzücken über die Schönheit ihrer Venus, denn die Abderiten gaben sich für feine Kenner und schwärmerische Liebhaber der Künste aus.

"Sie ist zu schön," riefen sie einhellig, "um an einem niedrigen Platze zu stehen. Ein Meisterstück, das der Stadt so viel Ehre macht und so viel gekostet hat, kann nicht zu hoch aufgestellt werden; sie muss das Erste sein, was dem Fremden beim Eintritt in Abdera in die Augen fällt." Diesem glücklichen Gedanken zufolge stellten sie das kleine niedliche Bild auf einen Obelisk von achtzig Fuss; und wiewohl es nun unmöglich war, zu erkennen, ob es eine Venus oder eine Wassernymphe vorstellen sollte, so nöthigten sie doch alle Fremden zu gestehen, dass man nichts Vollkommeneres sehen könne.

2. *Turn into German:* If you had been standing at the window you would have seen her sitting under the tree. He saw the bird fly out of the cage when it was opened. This girl has been ill for three months. He stood on the bridge and looked down into the water, where he could see the swans. He has already translated the first book and will begin to-morrow to translate the second. He broke off a twig from the tree. The sun rises at six o'clock. He could never have done that if you had not helped him.

3. Give in full the rule concerning the position of the separable prefix; the use of the indicative or subjunctive mood in conditional sentences; the use of the infinitive instead of past participle in the modal auxiliaries and a few other verbs; the change of the stem vowel of a strong verb in the 2d and 3d singular present indicative, and imperative singular; the use of *was* as relative pronoun in place of *das* or *welches*.

SECOND CLASS.

PHYSICS.

(*Pages* 259 *to* 466 *of Peck's Ganot's Physics. Time* 3 *hours.*)

1. Give the laws of the reflection of light. Explain fully what is meant by refraction and total reflection. Explain mirage. Draw and name the different kinds of lenses. Into what two classes are they divided? Discuss fully conjugate foci. Draw the course of rays through an astronomical telescope; through a compound microscope.

2. What are the poles and equator of a magnet. Give laws of magnetic attraction and repulsion. Describe, and tell uses of, the compass. What is the line of no declination? Where does one pass? Explain Ampère's theory of magnetism, and Morse's system of telegraphy. Tell as many of the uses to which dynamical electricity can be applied as you can.

GEOMETRY.

(*From the beginning of Bradbury's Geometry to the exercises in the second book. Time* 4 *hours.*

1. Define adjacent angles, perpendicular, right angle, parallel lines. If two triangles have two sides and the included angle of the one respectively equal to two sides and the included angle of the other, the two triangles are equal in all respects. If two angles of a triangle are equal the sides opposite them are also equal. The greater side of a triangle is opposite the greater angle. The greater angle of a triangle is opposite the greater side.

2. Find the number of degrees in one angle of an equiangular pentagon, hexagon, octagon, decagon. If two triangles have two sides of the one respectively equal to two sides of the other but the included angles unequal,

the third side of the one having the greater included angle is greater than the third side of the other. Prove also the converse of this last proposition. If the diagonals of a quadrilateral bisect each other, the figure is a parallelogram.

3. The diagonals of a rectangle are equal. Straight lines bisecting the adjacent angles of a parallelogram are perpendicular to each other. If $a : b = c : d$, show that $a + b : a - b = c + d : c - d$. A line drawn parallel to one side of a triangle divides the other two sides proportionally. A line dividing two sides of a triangle proportionally is parallel to the third side. Similar triangles are to each other as the squares of their homologous sides.

HISTORY.

(*Last* 200 *pages of Doyle's History of the United States. Time* 3 *hours.*)

1. Tell what you know of the revolt of Texas, and the proposition of the Texans to join the Union. What was the feeling of the country about it, and who were the leaders of the North and of the South? Who was President when the annexation was accomplished? Explain the Wilmot Proviso and Clay's Omnibus Bill. Give the names of the parties and of the candidates in the Presidential election of 1860. Sketch Lincoln's life. What was the action taken by the Southern States after his election? Which State took the lead?

2. Give a sketch of the operations in the West during 1862, beginning with the capture of Fort Henry, including Pope's operations on the Mississippi, and coming down to the Confederate retreat to Corinth.

3. Give the month and the year in which the following events occurred: the battles of Bull Run, Antietam, Fredericksburg, Chickamauga, Murfreesboro, and Cedar Creek; the combat between the *Merrimac* and the *Monitor*; the capture of Vicksburg and of Atlanta; Lee's surrender. Sketch the operations in the East from May to July, 1863.

THIRD CLASS.

ENGLISH.

(150 *pages of Swinton's English Grammar. Time* 3 *hours.*)

1. What is the ordinary way of forming plurals of English nouns? Explain *oxen*. Give origin of ordinary plural ending. How does gender differ from sex? Explain origin of *'s* and *s'*? Give difference between *my* and *mine*. When was *its* introduced? How does a relative differ in use from a personal pronoun? Make two sentences containing the interrogative *whom* and the relative *what* respectively. Explain by an example how a qualifying adjective both enlarges and limits the sense of a noun. Define transitive and intransitive verbs.

2. What are reflexive verbs? Give examples. When an intransitive is followed by a preposition how do you decide whether the verb has

become a compound transitive verb or not? Example. Name all the verbals. What is meant by the term object of a verb? By the term objective case? Parse words underlined in: *Maggie*, with *deepening* color, *went* without hesitation to Mr. Riley's elbow, and looked over the book, eagerly seizing one corner, and *tossing back* her mane.

ALGEBRA.

(*From common fractions to quadratics. Time* 4 *hours.*)

1. Reduce $\frac{x^4+x^3y+xy^3-y^4}{x^4-x^3y-xy^3-y^4}$ to its lowest terms. Simplify the expression $\frac{3}{(a-b)(b-c)}-\frac{4}{(b-a)(c-a)}-\frac{6}{(a-c)(c-b)}$. Reduce to its simplest form $\frac{b^2-7b+6}{b^2+3b-4}\times\frac{b^2+10b+24}{b^2-14b+48}\cdot\frac{b^2+6b}{b^3-8b^2}$. Given the equation $\frac{x-4}{x-5}-\frac{x-5}{x-6}=\frac{x-7}{x-8}-\frac{x-8}{x-9}$, to find the value of x. If A sets out from a certain place and travels at the rate of 7 miles in 5 hours, and B sets out from the same place 8 hours afterwards and travels in the same direction at the rate of 5 miles in 3 hours, in how many hours will B overtake A?

2. At what time between 4 and 5 o'clock are the hands of a watch at right angles to each other? Find the values of x and y in the equations $\frac{x}{a+b}+\frac{y}{a-b}=2a$, and $\frac{x-y}{2ab}=\frac{x-y}{a^2+b^2}$. Find the values of x, y and z in the equations $\frac{1}{x}+\frac{2}{y}=5$, $\frac{3}{y}-\frac{4}{z}=-6$; $\frac{3}{z}-\frac{4}{x}=5$. A man sculls down a stream, which runs at the rate of 4 miles an hour, for a certain distance in 1 hour and 40 minutes; in returning it takes him 4 hours and 15 minutes to arrive at a point 3 miles short of his starting place; find the distance he pulled down the stream and the rate of his pulling.

3. A cistern has 3 pipes, A, B and C. A and B will fill it in a minutes, A and C in b minutes, and B and C in c minutes; find the time in which each alone would fill it. A passenger train, after traveling an hour, is detained 15 minutes, after which it proceeds at three-fourths of its former rate, and arrives 24 minutes late; but if the detention had occurred 5 miles farther on the train would have been only 21 minutes late; determine the usual rate of the train. Find the value of $\sqrt{25a^2b^4c^2}+\sqrt[3]{8a^3b^6c^3}-\sqrt[4]{81a^4b^8c^4}-\sqrt[5]{32a^5b^{10}c^5}$. Find the fourth root of $81a^4-540a^3b+1350a^2b^2-1500ab^3+625b^4$.

BOTANY.

(*All of Gray's How Plants Grow. Time* 3 *hours.*)

1. Name three ways of distinguishing between exogenous and endogenous plants. Describe the growth of each. Name the organs of vegeta-

tion of a plant and tell the use of each. Why does a plant from a large seed grow more rapidly than one from a small seed? Describe the growth of biennals. Name two.

2. What is the use of the flower to the plant? of pollen? How are flowers, thorns, and branches related? Explain the relation fully.

3. Analyze the three flowers that have been given to you. (The flowers were *Hypoxis*, or stargrass; *Viola lanceolata*, or lance leaved violet; and *Symphytum*, or comfrey.)

FOURTH CLASS.

GEOGRAPHY.

(30 *pages of Guyot's Grammar School Geography and* 12 *pages of the Eclectic Intermediate Geography. Time* 3 *hours.*)

Locate Calcutta Patna, Lucknow, Delhi, Lahore, Surat, Hyderabad, Foochau, Changchau, Canton, Yeddo, Matsmai, Nagasaki, Kingkitau, Bushire. Where are these mountains: Lebanon, Taurus, Eastern Ghauts, Yunling, Karakorum, Kuenlun, Thian Shan, Hindoo Koosh, Neilgherry Hills? What two varieties of surface are found in India? What name is given to most of the inhabitants? What European nation governs them? Name three agricultural products of India. Name three products of Turkey in Asia. What is the title of the highest officer in India? What is the capital? Locate Mogador, Cairo, Alexandria, Melbourne, Sydney, Brisbane, Singapore, Bangkok, Kesho.

GERMAN.

(60 *pages of Otto's Second Book in German. Time* 3 *hours.*)

1. *Translate:* Die Schüler deren Aufgaben ich verbessert habe, sind sehr fleissig. Der Kaufmann, dessen Sohn diesen Brief geschrieben hat, heisst Walther. Welches ist der nächste Weg nach dem Schloss? Wo sind Ihre Söhne gewesen? Der Reisende hat zwei und dreissig Städte und sechs und neunzig Dörfer gesehen. Der Schneider hat den Rock noch nicht gemacht; er wird ihn morgen machen. Das Mädchen hat zwei Paar Handschuhe und sechs Paar Strümpfe gekauft. Ich habe Ihre Schwestern nicht gesehen; sie sind vielleicht in den Garten gegangen. Die reichen Leute sind nicht immer am glücklichsten. Die Fische haben keine Füsse.

2. *Translate:* My uncle's house is very small. I have not seen the girl. This exercise is very easy. The earth is smaller than the sun and the moon is smaller than the earth. Has the teacher a daughter? Were you always unhappy? The morning was cold but the evening was warm. I had a friend.

3. Decline *der Wein*, *unsere Mutter*, *mein Pferd*, *dieser Knabe*, *sein Haus*. Write a table of the personal pronouns. Conjugate the present and past indicative of *sein*, *haben*, *loben*, and *warten*.

FIFTH CLASS.

ARITHMETIC.

(*From compound numbers to partial payments. Time 5 hours.*)

1. A father bequeathed $14,535 to two sons, giving the younger $\frac{7}{10}$ as much as the elder; what was the share of each? If 45 men can do a piece of work in 15 days by working 8 hours per day, in how many days can 30 men working 9 hours per day do the same work? If 5 men can cut 45 cords of wood in 6 days, how many cords can 8 men cut in 15 days? What is the amount of $65.80, from December 28, 1867, to March 15, 1868, at 5 per cent? At 10 per cent?

2. What is the interest on $622.40 for 9 months, 29 days, at 12 per cent? At 15 per cent? The duty on 625 yards of silk at 40 per cent. ad valorem, was $550; what was the invoice price per yard, and for how much a yard must the importer sell the silk to clear 20 per cent? The cost of the public schools of a certain city for the next school year is estimated at $36,848; what amount of school tax must be assessed, the cost of the collecting being two per cent., and allowing 6 per cent. of the assessed tax to be uncollectible? To cover both goods and premium at 1 per cent., a merchant had a cargo of goods insured for $35,000; what was the value of the goods?

3. A broker bought 84 shares of telegraph stock ($50 each) at 94, and sold them at $100\frac{3}{7}$, how much did he gain? A commission merchant sold 650 barrels of flour at $5.75 a barrel, receiving a commission of $3\frac{1}{2}$ per cent., and invested the net proceeds in coffee, at $0.14 a pound, first deducting 2 per cent. commission; how many pounds of coffee did he purchase? What was his entire commission? How must cloth, costing $3.50 a yard, be marked, that a merchant may deduct 15 per cent. from the marked price and still make 15 per cent. profit? The distance from Washington to St. Louis is about 714 miles, and a degree of longitude at Washington contains about 54 miles; when it is 9 o'clock at St. Louis what time is it at Washington?

4. If $990.73 gain $55.67 in 9 months 19 days, what principal is required to gain $31.12 in 2 years 5 months 26 days? Bought 42 pounds of coffee at the rate of $3\frac{1}{2}$ pounds for $1.00, and 75 pounds more at the rate of 7 pounds for $2.33\frac{1}{3}$; sold the whole at the rate of 9 pounds for $3.25. How much did I gain or lose? A dealer in horses sold 24 for $150 each. On one-half of them he gained 30 per cent., and on the remainder he lost 20 per cent. Did he gain or lose on the whole, and how much? A grocer uses for a one-pound weight one that weighs only 15.75 ounces; what per cent. does he gain by his dishonesty?

5. A man bought a farm of 160 acres at $32 an acre; he paid $200 for fencing, $150 for repairs of the buildings, and $18 for improving the grounds; at what price per acre must it be sold to gain 25 per cent. on the

entire cost? The longitude of Boston is 70° 4′ West of London; what will be the time in Boston when it is 3 hr. 35 min. A. M. in London? Sold a horse at 33⅓ per cent. gain, and with the money bought another horse, which I sold for $120, and lost 25 per cent. Did I gain or lose by my trading, and how much? A grocer bought 60 gallons of milk at $0.12 per gallon, and sold it at 5 cents a quart. How much, and what per cent., was his gain?

Session of 1883-'84.

OFFICERS.

Principal.....WILLIAM ALLAN, M. A.
Instructors.....D. C. LYLE, M. A.,
J. JOHNSON, JR., A. B.,
W. J. WITZENBACHER, A. B.,
C. H. SUMWALT, (*Music and Drawing.*)
Matron.....MRS. JOSEPHA YOUNG.

PUPILS.

First Class.

HENRY, WILLIAM COLTMAN,
JOHNSON, ERNEST HEMSLEY,
LANIER, CHARLES DAY,
ROGERS, HARRY,
TAYLOR, FRANK WILHELM.

Second Class.

BIGGIN, FREDERICK CHILDS,
CHASE, WILLIAM FLOYD,
DANNELLY, CHARLES OTIS,
DIAMOND, WALTER GORMLEY,
LEAMY, EUGENE,
MILLER, WILLIAM HAMAN,
RUSSELL, ALLEN TRAVES,
SCHUTZ, JOHN WILLIAM,
STRONG, HARRY CLINTON.

Third Class.

BLACK, SAMUEL SUTTON,
CRIST, GEORGE EDWARD,
CROOK, HENRY WALLIS,
DUVALL, JAMES BIRCH,
EVANS, CHARLES AMOS,
FRANKLIN, BENJAMIN ALVEY,
GANTT, CHARLES STEUART,
HALL, AMHERST BELCHER,
JONES, RUSSELL AUBREY,
LEWIS, ROBERT PROUD,
MARSH, WILLIAM LEE,
McVEIGH, EDWARD WARREN RATCLIFFE,
SHEFFER, JOHN WILLIAM,
SMITH, JAMES VERNAY.

Fourth Class.

ALLEN, EDWARD REUBEN,
COOK, JOSEPH GUILD,
DELPHEY, CHARLES DUHURST,
DITMAN, NELSON GIBSON,
GRAFFLIN, CHARLES FREDERICK,
HAUER, DANIEL JACOB,
KERLINGER, JOSEPH HENRY,
LANDRETH, CLARENCE PATTERSON,
NASON, ROBERT LAUTENBACH
TAYLOR, GEORGE EDWARD MARSHALL.

Fifth Class.

BEALL, FRANK HOUSTON,
BROOKS, WALTER LITTELL,
COOKSEY, JOSEPH CASE URBAN,
EDWARDS, EUGENE,
FERGUSSON, ALAN ROBB,
FULLER, THOMAS NELSON,
GILMOR, HARRY,
MCCAW, THOMAS DEGRAFFINREAD,
PATTISON, HUGH DEVALIN,
SELBY, JAMES LEE,
STOVER, ROBERT DOUGLAS,
THOMAS, GEORGE CULBREATH.

Schedule.

The table below gives the number of hours of preparation and recitation assigned per week to the various branches of study during the First Term of the Session of 1883–'84.

	ENGLISH.	GEOGRAPHY.	HISTORY.	GERMAN.	MATHEMATICS.	PHYSICS.	PHYSIOLOGY.	WRITING.	DRAWING.	BOOK-KEEPING.	MUSIC.	TOTAL.
First Class	2½	.....	6	6	10¼	6	.....	.....	2½	.....	1½	35
Second Class	5	.....	.....	7	11	.....	6	.....	2½	2	1⅝	35
Third Class	9	3½	.....	6½	11	.....	.....	2	1½	.....	1⅝	35
Fourth Class	10	5	.....	.....	11	.....	.....	2	1½	.....	1½	31
Fifth Class	9	5	.....	.....	12	.....	.....	2½	.....	.....	1½	30

Donations.

The following gentlemen have made gifts of books to the library of the school during the year:

GEN. A. A. HUMPHREYS, Report upon the Primary Triangulation of the United States Lake Survey.

GEN. JNO. EATON, Report of the Commissioner of Education, 1881. Circulars of Information of the Bureau of Education, Numbers 1, 2, 3, 4, 5.

MR. W. F. CHASE, Tales of the Caravan, Inn, and Palace.

GEN. W. B. HAZEN, Report of the Chief Signal Officer, U. S. A., 1881. Weather Proverbs.

HON. J. F. C. TALBOTT, Tenth Census of the United States. Volumes I, II.

COL. WM. PRESTON JOHNSTON, Life of Gen. Albert Sidney Johnston.

CAPT. GEO. M. WHEELER, Appendix OO of the Annual Report of the Chief of Engineers, U. S. A., 1879.

MESSRS. POOLE & HUNT, Illustrated Catalogue of the Leffel Double Turbine Water Wheels.

MR. F. H. ANSCHUTZ, Collier's Cyclopedia.

HON. A. P. GORMAN, Report of Commissioner of Agriculture, 1880, 1881, 1882. Report of Secretary of Treasury, 1881, 1882. Report of the U. S. Fish Commission, 1879, 1880. Report on Commerce of U. S., 1881, 1882. Report of Commissioner of Education, 1879, 1880, 1881. Report on Production of Gold and Silver in U. S., 1881, 1882. Report of National Board of Health, 1879. Report on Contagious Diseases of Domestic Animals, 1880, 1881. Message and Documents, 1881, 1882, 1883.

Catalogue of Alumni.

INSTRUCTORS.

W. ALLAN, A. M., appointed July, 1873. Principal.

D. C. LYLE, M. A., appointed November, 1873.

J. KRUTTSCHNITT, B. S., C. E. appointed November, 1873. Resigned June, 1878. Chief Engineer and Superintendent of the New Orleans and Texas Railroad; stationed at Algiers, La.

A. C. H. RUSSELL, appointed July, 1874. Resigned August, 1877. Passed Assistant Surgeon in the United States Navy; on duty at the Navy Yard, Washington, D. C.

S. T. MORELAND, C. E., M. A., appointed August, 1876. Resigned August, 1880. Professor of Physics in Washington and Lee University, Lexington, Va.

D. C. HUMPHREYS, C. E., appointed August, 1878. Resigned April, 1879. Chief Draughtsman to the Corps of United States Engineers engaged in the Survey of the Missouri and Arkansas rivers; stationed at St. Louis, Mo.

W. I. JONES, appointed August, 1877. Resigned August, 1879. Traveling agent for Guggenheimer & Co., wholesale grocers, 46 Hanover street, Baltimore.

H. LEE SELLERS, A. M., appointed April, 1879. Resigned July, 1881. Principal of the City College, Galveston, Texas.

H. L. GANTT, A. B., appointed August, 1880. Resigned August, 1883. Student of Engineering in Stevens Institute, Hoboken, N. J.

JOHN JOHNSON, JR., A. B., appointed August, 1881.

C. H. SUMWALT, appointed August, 1881.

W. J. WITZENBACHER, A. B., appointed August, 1883.

ALUMNI.

1874.

ASHLOCK, CHARLES MARION. From December, 1873, to June, 1874.

BAKER, GEORGE FRANKLIN. From January, 1874, to June, 1874.

CARLISLE, EDWARD GRAFTON. From November, 1873, to June, 1874. Was, last May, a conductor on the cars of the City Passenger Railway Company in Baltimore.

COOK, JOSEPH THOMAS. From November, 1873, to July, 1874.

KELLER, SAMUEL FREDERICK. From November, 1873, to October, 1874.

SCRIMGER, HAROLD BRUCE. From December, 1873, to July, 1874.

SWITZER, GEORGE WASHINGTON. From January, 1874, to July, 1874.

1875.

ADREON, CHRISTOPHER COLUMBUS. From November, 1873, to June, 1875. Dentist, 196 Pennsylvania avenue, Baltimore.

BAKER, JOHN LEE. From November, 1873, to February, 1875. House painter in Washington, D. C.

CLARK, GEORGE BEAUREGARD. From December, 1873, to February, 1875.

COCHRANE, CHARLES EDWARD. From November, 1873, to August, 1875. Pier clerk at the Northern Central Railway freight office, Canton.

CRISS, LLOYD PARKS. From December, 1873, to February, 1875. On United States ship Saratoga.

HUTCHINSON, ROBERT JAMES. From August, 1874, to February, 1875.

JARRETT, HARRY MILLINGTON. From November, 1873, to July, 1875. Reporter for the *Evening News*, Baltimore.

JUDSON, EDWARD STOUBT. From February, 1875, to June, 1875. Clerk with Alphonso Youngs, Washington, D. C.

McDUFFIE, ARCHIBALD FITZHUGH. From February, 1874, to February, 1875. Removed to Florida.

MEALY, ALFRED. From November, 1873, to January, 1875. Shipping clerk for Gilbert Brothers & Co., manufacurers and wholesale druggists, 92 S. Howard street, Baltimore.

PERSON, SAMUEL JONES. From January, 1874, to June, 1875. Lawyer in North Carolina.

ROURKE, WILLIAM. From January, 1874, to July, 1875. Painter for the Baltimore Plow Company, 204 S. Howard street, Baltimore.

SMITH, FRANKLIN. From November, 1873, to July, 1875. In the shops of Bartlett, Hayward & Co., iron founders and machinists, Scott and Pratt streets, Baltimore.

STEWART, WILLIAM FRANCIS. From January, 1874, to May, 1875. Removed to Nebraska.

STOCKSDALE, JACOB PAPPLAR. From November, 1873, to July, 1875. Buyer for Edwin W. Adams & Co., shipping and commission merchants, 114 Wall street, N. Y.

TALIAFERRO, GAWIN CORBIN. From December, 1874, to February, 1875.

1876.

BARTON, LEWIS PHILIP. From February, 1874, to June, 1876. Farming near Richmond, Indiana.

BURGAN, CHARLES EDWARD. From July, 1874, to May, 1876. Clerk in the central office of the Baltimore and Ohio Railroad Company, corner Calvert and Baltimore streets, Baltimore.

CUTINO, ANDREW VINCENT. From November, 1873, to July, 1876. With H. W. Webb & Son, hardware, 148 W. Pratt street, Baltimore.

FINNEY, JOHN ALPHONSO. From March, 1874, to July, 1876. Honarary scholar 1875–6. Order clerk for Poole & Hunt, iron founders and machinists, Woodberry, Md.

HANEY, CHARLES KNOWLES. From January, 1874, to December, 1876. Honorary scholar 1876–7. Clerk in the Merchants' and Miners' Transportation Company, Baltimore.

HOOK, RICHARD FRANKLIN. From January, 1873, to July, 1876. Honorary scholar 1875–6. Civil engineer on a railroad in Alabama.

HYNSON, PERCY RINGGOLD. From January, 1874, to October, 1876. Clerk with George Young & Co., commission merchants, 80 North street, Baltimore.

MEALY, JAMES NELSON. From December, 1873, to July, 1876. Honorary scholar 1875–76. Merchant in Braxton county, W. Va.

MEDAIRY, JOHN SOMMERFIELD. From November, 1873, to May, 1876. Messenger for the Baltimore and Ohio Express, from Baltimore to New York.

NULLET, GEORGE. From January, 1874, to May, 1876. Managing Mr. L. Tobin's store, near Owings' Mills, Md.

SMITH, HORACE LAWRENCE. From November, 1873, to May, 1876. Member of the firm of Patterson Bayne & Co., importers of coffee, 6 Commerce steeet, Baltimore.

STRAUGHN, WILLIAM LAWRENCE. From July, 1874, to September, 1876. Honorary scholar 1876–7. Clerk in the accounting department of the Baltimore and Ohio Railroad, Camden Station, Baltimore.

UNDERWOOD, HARRY. From November, 1873, to July, 1876. In the shops of Bartlett, Hayward & Co., iron founders and machinists, Scott and Pratt streets, Baltimore.

WILLIS, HERVEY. From January, 1873, to May, 1876. Machinist, Mount Clare works. Died August, 1880.

1877.

BOND, GEORGE LEDNUM. From November, 1873, to May, 1877. In charge of the printing office of Smith, Hanway & Co., baking powders, 116 S. Eutaw street.

DAWSON, CHARLES FRANCIS. From November, 1873, to May, 1877. Janitor in the Biological Laboratory of the Johns Hopkins University, Baltimore.

DUNN, JAMES WILLIAM. From August, 1874, to August, 1877. Artist and photographer for A. Hoen & Co., lithographers, Holliday and Lexington streets, Baltimore.

GIBBONS, FRANCIS MARION. From October, 1876, to July, 1877.

GILMYER, WILLIAM. From June, 1875, to May, 1877. Blacksmith in Baltimore.

HARDING, CHARLES HOWARD. From February, 1874, to January, 1877. Clerk with Moses Cohen & Sons, dry goods, 23 Hopkins Place, Baltimore.

HARDING, WILLIAM HENRY. From November, 1873, to January, 1877. Discount clerk for the Traders' National Bank, German and Grant streets, Baltimore.

JONES, WILLIAM IRVING. From November, 1873, to July, 1877. Honorary scholar 1876–7. Teacher on the McDonogh farm, 1877–9. Instructor in Music in McDonogh School, 1877–9. Traveling agent for Guggenheimer & Co., wholesale grocers, 46 Hanover street, Baltimore.

KING, JOHN CLINTON FOULK. From December, 1873, to March, 1877. Manifest clerk for the Baltimore, Chesapeake and Richmond Steamboat Company, 90 Light street, Baltimore.

KOLB, WILLIAM ALBERT. From June, 1875, to May, 1877. Member of the Association of Pilots of Chesapeake Bay.

MEDAIRY, CHARLES MARSHALL. From December, 1873, to February, 1877. Clerk for the Baltimore and Ohio Express Company, corner Calvert and Baltimore streets, Baltimore.

NICOLS, JEREMIAH DORSEY. From January, 1874, to August, 1877. Honorary scholar 1876–7. Salesman with Hodges Brothers, 23 Hanover street, Baltimore.

POLLITT, FRANK ALEXANDER. From November, 1873, to August, 1877. Book-keeper for David Reay & Co., wholesale paints, 17 S. Gay street, Baltimore.

WILSON, WILLIAM HILAND. From August, 1875, to July, 1877.

1878.

BIELER, ALPHONSOS HENRY. From July, 1874, to August, 1878. Assistant to E. F. Baldwin, architect, corner Lexington and St. Paul streets, Baltimore.

BROOKS, JOSEPH DIXON. From December, 1874, to August, 1878. Honorary scholar, 1877–8.

CANBY, HARRY LEE. From September, 1876, to July, 1878.

DORRITTEE, THOMAS EDWARD ARINGDALE. From August, 1877, to July, 1878.

EDWARDS, AMERICUS. From November, 1873, to August, 1878. Honorary scholar, 1877–8. Teacher on the McDonogh farm, 1879–80. Assistant corresponding clerk for Poole & Hunt, iron founders and machinists, Woodberry, Md.

GANTT, HARRY LAURENCE. From November, 1873, to August, 1878. Honorary scholar 1877–8. A. B. of the Johns Hopkins University, June, 1880. Instructor in McDonogh School, 1880–3. Student of Engineering in Stevens Institute, Hoboken, N. J.

GARRETT, FRANK LEE. From January, 1873, to July, 1878. Orange farming at Wild Wood, Sumter county, Florida.

NEVINS, WILLIAM WILBERFORCE. From August, 1875, to July, 1878. Clerk with William J. Youngman, provisions, Townsend street and Argyle avenue, Baltimore.

POET, HARRY BENSON. From November, 1873, to August, 1878. Clerk at the Northern Central Railway shops, Baltimore.

RICHARDS, ARTHUR ORLANDO. From July, 1876, to August, 1878.

RUSSELL, JOHN WILLIAM. From March, 1875, to July, 1878.

SMITH, RUSH. From November, 1873, to July, 1878. Clerk for the Sterling Manufacturing Company (limited), 25 Green street, Baltimore.

WIGART, PLINY EARL. From August, 1877, to July, 1878. Manager of Dalsheimer's shoe house, 119 N. Gay street.

TRAYLOR, JAMES GEDDY. From February, 1875, to August, 1878. Secretary for Maj. T. B. Ferguson, U. S. Fish Commission, Washington, D. C.

YOUNG, CHARLES SELDEN. From November, 1873, to July, 1878. Honorary scholar 1877–8. Civil engineer on the West Virginia Central and Pittsburgh Railroad.

1879.

ADAMS, WALTER SCOTT. From March, 1875, to July, 1879.

BREMER, HARRY COOPER. From June, 1875, to October, 1879. City buyer for Rouse, Hempstone & Co., wholesale notions, 321 W. Baltimore street, Baltimore.

CRANE, ARTHUR BATHURST. From July, 1876, to June, 1879. In the United States Signal Corps, stationed in Erie, Pa.

DORMAN, JOHN. From July, 1876, to August, 1879. Farmer in Jefferson county, W. Va.

GLASCOCK, EUSTACE STRAUGHN. From January, 1875, to August, 1879. Naval cadet on board U. S. S. Nipsic.

HAYNES, AUSTIN BALDWIN. From September, 1876, to August, 1879.

JOHNSON, JOHN, JR. From November, 1873, to August, 1879. Honorary scholar 1878-9. A. B. of the Johns Hopkins University, 1881. Instructor in McDonogh School.

LINDSLEY, WILLIAM LAWSON. From March, 1875, to July, 1879. Clerk in the Pension office, Washington, D. C.

LUSBY, LOUIS EDWARD. From April, 1877, to June, 1879. Clerk with N. H. Sollers, ladies' shoes, 75 Lexington street, Baltimore.

MARRIOTT, JAMES CURLEY. From October, 1876, to October, 1879. On United States training ship in the Pacific Ocean.

ROGERS, GRAFTON LLOYD. From August, 1875, to August, 1879. Honorary scholar 1878-9. Solicitor for the Firemen's Insurance Company of Baltimore, South and Second streets, Baltimore.

TITCHNER, JAMES. From August, 1877, to August, 1879. Employed at Duffy's Malt Whiskey establishment, Park avenue and Fayette street, Baltimore.

WILLIAMS, GEORGE FRANKLIN. From March, 1877, to June, 1879.

WILSON, JAMES KIRKLAND. From August, 1878, to June, 1879.

1880.

BETTS, WILLIAM BAILIE. From August, 1876, to July, 1880. With Sharp & Dohme, chemists and druggists, Pratt and Howard streets, Baltimore.

BRUNDIGE, EDWARD PARISH. From July, 1876, to May, 1880. Bookkeeper for F. A. Davis & Co., tobacconists, 32 Light street, Baltimore.

COLE, DOYENS BALLARD. From July, 1879, to July, 1880. With Thos. J. Irving & Co., manufacturers of shirts, St. Paul and Fayette streets, Baltimore.

DEWITT, ROBERT LEE. From January, 1875, to August, 1880. Honorary scholar 1879-80. Baltimore agent for Whitney Brothers, manufacturers of glass, Philadelphia.

EVANS, WALTER MEAD. From June, 1877, to July, 1880. In the shops of Bartlett, Hayward & Co., iron founders and machinists, Scott and Pratt streets, Baltimore.

FAIRBANK, WILLIAM PRESCOTT. From January, 1877, to August, 1880. Honorary scholar 1879-80. Notice clerk in the freight delivery office of the Baltimore and Ohio Railroad, Camden Station, Baltimore.

FALES, CHARLES ESHBAUGH. From January, 1877, to June, 1880. Clerk with Charles T. Foster & Co., public weighers, 61 S. Gay street, Baltimore.

FARDWELL, HARRY RINGGOLD. From February, 1875, to June, 1880. Assistant to Washington Gill, road commissioner for St. Charles county, Missouri.

FOWLER, HARRY MILTON. From August, 1879, to July, 1880.

HARRINGTON, JOHN SAMUEL. From October, 1879, to July, 1880. With M. Perine & Sons, western potteries, 713 W. Baltimore street.

MORRIS, JOHN EDWARD. From July, 1876, to June, 1880. With Mann & Co., solicitors of patents, 116 W. Baltimore street, Baltimore.

RILEY, JOHN WILLIAM MATTHEW. From September, 1876, to June, 1880. Clerk with R. T. Walters & Sons, lumber commission merchants, Union Dock, Baltimore.

MASSON, CHARLES EDGAR. From October, 1879, to July, 1880. With the Herald Publishing Company, Eutaw and Baltimore streets, Baltimore.

ROBERTS, HOWLAND. From December, 1879, to July, 1880.

SIMONDS, JAMES MONTGOMERY. From July, 1879, to August, 1880. Press-feeder for Isaac Friedenwald.

WAGNER, CHARLES FLEMING. From August, 1878, to December, 1880. With C. B. Hamilton, paper hanger, 135 Druid Hill avenue, Baltimore.

WILKINSON, ALLEN BYRON. From August, 1876, to July, 1880. Stock clerk with Sickel, Hellen & Co., wholesale notions, 22 Hanover street, Baltimore.

1881.

BOURNE, THOMAS. From November, 1876, to June, 1881. With Dorgan & Co., stoves, Light and Lombard streets, Baltimore.

BRIESSEN, ROBERT. From July, 1878, to June, 1881. In the office of the Beaver Dam Marble Company, Constitution street, near Madison, Baltimore.

BRUNDIGE, JOHN PRICE. From July, 1878, to July, 1881.

BURGESS, GEORGE LEWIS. From June, 1877, to June, 1881. Honorary scholar 1880-81. Draughtsman for Snowden & Cowman, manufacturing machinists, 86 W. Fayette street, Baltimore.

CHENOWITH, RICHARD. From August, 1878, to July, 1881. Clerk for S. M. Sindall & Co., stoves, 6 and 8 W. Pratt street, Baltimore.

GRIFFITH, ALFRED CRABB. From January, 1877, to August, 1881. Honorary scholar 1880-81. Clerk in the accounting department of the Baltimore and Ohio Railroad, Camden Station, Baltimore.

HINTON, PRESLEY LEWELLYN. From July, 1879, to February, 1881. With D. G. Weems & Co., manufacturers of artificial stone and marble, 76 N. Calvert street.

JOHNSON, WILLIAM BROADBENT. From August, 1879, to July, 1880. In the office of the Baltimore *Sun*.

MILBURN, ROBERT FREDERICK. From June, 1877, to June, 1881. City salesman for Charles E. Keyworth, tobacconist, 217 W. Baltimore street, Baltimore.

MILLER, GEORGE WINCHESTER. From June, 1877, to November, 1881. Entry clerk with Pearre Brothers & Co., wholesale dry goods, 2 and 4 Hanover street, Baltimore.

NETRE, EDWARD. From February, 1875, to June, 1881. Discount clerk in the Howard Bank, Howard and Fayette streets, Baltimore.

NORRIS, LLOYD MATSON. From August, 1878, to January, 1881. Giving lessons in music and dancing in Baltimore.

RIACH, WILLIAM. From June, 1875, to June, 1881. Clerk for R. G. Keene, Baltimore agent of the U. S. Collection Agency, 10 Morse Building, Baltimore.

SANDERSON, HARRY SCHLEY. From August, 1877, to August, 1881. Entry Clerk for Carpenter, Cornell & Co., importers of fine groceries and tobacco, 117–123 Water street, New York.

SUMWALT, CHARLES HAMLIN. From August, 1876, to August, 1881. Honorary scholar 1880–81. Instructor in McDonogh School.

THOMPSON, DEVALANGIN FRANCIS. From July, 1878, to July, 1881. Clerk for the Northern Central Railway Company, Calvert Station, Baltimore.

VAN HOLLEN, GEORGE HENRY. From August, 1876, to June, 1881. Clerk for Tyler & Brothers, cracker bakers, 47 and 49 W. Pratt street, Baltimore.

1882.

ANDERSON, JOHN WILLIAM. From August, 1881, to June 1882. With Mrs. F. Hirsch, milliner, 547 W. Baltimore street, Baltimore.

ANSCHUTZ, FRANK HAMILTON. From August, 1878, to August, 1882. Honorary scholar 1881–2. Clerk in the accounting department of the Baltimore and Ohio Railroad, Camden Station, Baltimore.

BALDWIN, BENJAMIN FRANKLIN. From August, 1879, to August, 1882. Clerk with Neal, Chumbley & Whaling, grocers, Roanoke, Virginia.

BILLINGSLEY, THOMAS JOHN RUSSELL. From August, 1881, to July, 1882. At the Manual Labor School, Catonsville, Md.

CHABOT, WILLIAM HINSON. From August, 1878, to August, 1882. Honorary scholar 1881–2. Postmaster and steward at McDonogh School, 1882–3. Civil engineer on the Ohio and Baltimore Short Line Railway, Connellsville, Pa.

CHANDLER, ARCHIBALD LOUIS. From July, 1879, to July, 1882. Clerk in the office of N. S. Hill, purchasing agent for the Baltimore and Ohio Railroad, corner Calvert and Baltimore streets, Baltimore.

COLLIER, CHARLES ASHBY. From July, 1878, to June, 1882. Clerk for David Reay & Co., paints, 17 S. Gay street, Baltimore.

DEWITT, WILLIAM RUSSELL. From August, 1877, to August, 1882. Honorary scholar 1881–2. Student at the Johns Hopkins University.

DORSEY, THOMAS HENRY. From July, 1878, to June, 1882. Clerk for L. Jeff. Milbourne & Co., newspaper advertising agents, 126 W. Baltimore street, Baltimore.

KERSEY, JOHN DAVID. From July, 1878, to June, 1882. With N. B. Shorey & Co., plumbers and gas fitters, West Falls avenue and Pratt street.

1883.

ATWOOD, ALBERT HAMMOND. From August, 1876, to July, 1883. Honorary scholar 1882–3. Postmaster and steward at McDonogh School.

BROWN, GEORGE RUSSELL. From July, 1880, to August, 1883. At Elkton, Md.

FAIRBANK, DAVID CHURCH. From July, 1879, to August, 1883. With King Brothers, city printers, 162 W. Baltimore street, Baltimore.

MCCOLM, ROBERT LEWIS. From August, 1880, to January, 1883. With Alexander Dodd & Co., manufacturers of harness, etc., Baltimore and Hanover streets, Baltimore.

MIDDLEKAUFF, WILLIAM EMANUEL. From August, 1880, to June, 1883. Clerk for Frank & Hammerslough, wholesale hatters, 306 W. Baltimore street, Baltimore.

MILLER, WILLIAM ELLIOTT. From August, 1879, to August, 1883. With John G. Mengel & Co., type founders and electrotypers, 31 German street, Baltimore.

RICHARD, AUGUSTUS CLAUDE. From August, 1880, to July, 1883. With Findlay, Roberts & Co., wholesale dealers in hardware, 9 Calvert street, Baltimore.

RISTON, JAMES PRESTON. From August, 1878, to August, 1883. Honorary scholar 1882–3. Clerk in the accounting department of the Baltimore and Ohio Railroad, Camden Station, Baltimore.

ANNUAL REPORT

OF THE

WATER DEPARTMENT

TO THE

Mayor and City Council of Baltimore,

FOR THE

FISCAL YEAR ENDING DECEMBER 31, 1883.

Officers of the Water Board,

DECEMBER 31, 1883.

COMMISSIONERS.

HON. FERDINAND C. LATROBE, MAYOR,
Ex-officio President.

GEORGE U. PORTER, *Secretary.*
JOHN F. HUNTER,
GEORGE P. THOMAS,
THOMAS BOND,
N. RUFUS GILL,
WILLIAM A. MARBURG.

[William A. Fisher resigned as a member of the Board December, 1882, and Henry M. Warfield was appointed to fill the vacancy, serving until November, 1883, when he resigned.]

REGISTRAR'S DEPARTMENT.

E. SHRIVER, *Water Registrar.*
JAS. A. MARRIAN, *General Book-Keeper.*
JAS. S. ETCHBERGER, *Cashier.*
J. J. C. SCULLY, *Clerk of Errors.*
E. A. HOGG, *Ledger Clerk.*
E. J. EDWARDS, "
W. F. HYNSON, "
JNO. GIBSON, "
THOS. H. BLICK, *Clerk of Delinquents.*
SAMUEL A. HART, " "
BENJ. PRICE,
GEORGE A. COLEMAN,
JNO. D. ALCOCK,
D. G. CARLISLE,
S. L. AUERBACH,
W. A. MALONEY, } *District Inspectors and Bill Distributors.*
GEORGE W. EMMERICH, *Hydrant Inspector.*

ENGINEER'S DEPARTMENT.

ROBT. K. MARTIN, *Chief Engineer.*
JAMES CURRAN, *Engineer and Superintendent City Division.*
WM. L. KENLY, " " " *County* "
RICHARD D. MURPHY, *Clerk.*

REPORT.

BOARD OF WATER COMMISSIONERS--CITY HALL,

BALTIMORE, January 2, 1884.

To the Honorable the Mayor
and City Council of Baltimore:

GENTLEMEN:

In accordance with the duties of the Board, as required by ordinance, the following report is presented for the year ended December 31, 1883:

FINANCIAL.

There remained to the credit of the Gunpowder Permanent Supply account December 31, 1882	$6,633 52
And to revenue account	18,435 46
Making total cash balance December 31, 1882	$25,068 98

Amount brought forward.....	$25,068 98
Add net receipts from all sources of revenue for 1883.....	611,112 02
Appropriation for fire-plugs and fountains.	5,000 00
New loan, 4 per cent., taken at par by City Finance Commissioners, and proceeds placed to credit of Water Board.....	500,000 00
Made amount available for 1883.....	$1,141,181 00
The disbursements during the year ended December 31, 1883, aggregated.....	868,141 51
Leaving balance above date.....	$273,039 49

Composed as follows:

Permanent Supply account...	$3,833 52	
Water Board account.....	26,351 29	
Registrar's cash.....	1,989 35	
Lake Clifton account.....	240,865 33	
		$273,039 49

REVENUE.

The net revenue received during the year 1883 from water rents, meter supplies, plumbing, &c., was $611,112.02, against $604,305.32 from same sources for the previous year—an increase for 1883 of $6,806.70. Besides the revenue as above, the City Council appropriated $5,000 for fire-plugs, pumps, fountains, &c. The working expenses of the Department for the year amounted to $98,917.27, against $93,011.81 in 1882—an increase of $5,905.46, which was chiefly for betterments at Loch Raven, Lake Montebello, Druid Lake,

Hampden, and Mount Royal Reservoirs. The amount of interest paid by the Board on water stock issued by the city was for the past year $459,296.66—an increase over the previous year of $6,666.66, and for 1884 the amount which will be required to pay interest on water loans will be $472,629.98. This increase in the interest arises from the City Finance Commissioners having taken by the authority vested in them the $500,000 4 per cent. loan for account of the sinking fund of the city on the 1st of July last, and upon which four months' interest was paid on the 1st of November.

By a careful estimate of the revenue for the year 1884, under the ordinance passed at the last session of the Council, and approved by the Mayor October 10, 1883, reducing the rates for water, the amount will be short of 1883 by upwards of $80,000, and the increased interest to be provided, $20,000, will in round figures, leave the Department short, for 1884, $100,000. The same ordinance, however, provides to meet this deficiency a tax levy of three cents upon every hundred dollars of assessable property in the city of Baltimore. The principle embodied in this ordinance for levying for the water used for public purposes is what the Board of Water Commissioners have repeatedly urged upon your honorable body ever since the revenue of the Department become sufficient for its maintenance.

The following shows the receipts from water rents, plumbing, &c., for the last four years:

1880	the	amount	collected	was.....	$606,879 06
1881	"	"	"	.....	599,223 11
1882	"	"	"	.....	604,305 00
1883	"	"	"	.....	611,112 02.

Meter supplies, included in the above, were for

1880	$72,483 52*
1881	57,853 12
1882	61,827 31
1883	68,786 88

In reference to the new loan for $500,000, the Board experienced much disappointment in its negotiation. They had based their calculations on the same being disposed of in the open market, and as the needs of the Department required, and had anticipated that at least ten per cent. premium would have been realized; but it was taken entire and at par on the 1st of July last by the City Finance Commissioners, thus not only depriving this Department of the $50,000 premium, which the loan would have commanded in the open market, but imposing the burden of interest on at least one-half of the amount of loan a year or more in advance of the Department's need for the money.

The late Council having authorized the Finance Commissioners so to act, we do not wish here to be understood in a censorious sense, as our only object in referring to the matter in this report is that the Water Board may also be understood by your honorable body as having had no volition in the negotiation which deprived it of so much means that ultimately may have to be provided to complete Clifton Reservoir, and furnish needed supply mains.

---

* For 1880 the rate for water supplied by meter was 12 cents per 1,000 gallons, but for the last three years has been furnished at eight cents, less 10 per cent. discount.

ENGINEER'S DEPARTMENT.

The Chief Engineer in his report shows the number of new supplies in 1883 were 4,362; distributing mains, including all sizes of pipe from 1½ inch to 30 inches, laid during the year equalled 16⅗ miles in length. A special pipe-line was laid at the expense of the Department for the relief of Bayview Asylum, and nothing further can be done to increase the supply of that institution until other streets in the northeastern section of the city are extended to admit of a larger main being laid. Three lines of 20 and 30-inch pipes were laid during the year in the south, southwestern and northeastern sections of the city, the cost of which, $96,988.57, was paid for out of the new 4 per cent. loan. The total number of fire-plugs in the city is 916, of which 29 were erected in 1883, when the first appropriation since 1877 was made by your honorable body for same.

The number of pumps repaired was 37; removed, 26, and wells filled up, 21. Ten new fountains for public use were erected during the year, making the total number now in the city 60. During the year 60 meters were placed in operation, 30 withdrawn and indicators substituted. The whole number of meters and indicators in operation at the close of the year were 763. The quantity of water registered by these supplies for the year aggregated 905,268,040 gallons, an increase of 42½ million gallons over 1882. The high-service pumps sent to the upper reservoir in Druid Lake during the year nearly eight hundred millions of gallons, an increase of upwards of 80 mil-

lions over 1882. At Lake Roland the interior of the gate-house has been repainted and slate roof repaired. Jones' Falls conduit continues in good state of preservation. At Hampden Reservoir the iron railing and interior of gate-house have been repainted. At Druid Lake the carriage-road around it, the most popular drive in the Park, has been kept in order at the expense of the Water Department. The railing around the lake and the interior of the pump-house, stop-house, vault-house and tower have all been repainted. Mount Royal Reservoir, which completes the chain of the Jones' Falls works, now receives its principal supply of water from the Gunpowder. The only water that enters it from Jones' Falls is through the fountain-pipe from Druid Lake. The screen well, iron railing around the reservoir and the vault-house have been repainted, and other improvements there made. At Loch Raven a good deal of necessary work has been done during the year, giving to the gate-house, the slopes and other surroundings a more finished and attractive appearance. The tunnel or conduit from the Gunpowder was inspected February 21st, 1883, and found to be in as good a condition as when completed. At Lake Montebello the gate-house has been floored with concrete, and iron railing placed around the gate chambers therein; also, work of grading has been done on road around the lake. At Lake Clifton work was resumed on the 13th April, but the contractors failing, their contract was annulled October 26th, 1883, and the work relet to others November 23d, 1883. There is a prospect of the work being more vigorously pushed by the new contractors. The entire system of works, embracing both sources of supply, have been

kept in good condition, and without any extraordinary repairs being required during the year.

For full details of the working of the Water Department for the past year, your honorable body is referred to the accompanying reports of the Water Registrar, the Chief Engineer and his assistants.

FERDINAND C. LATROBE,
President Ex-Officio.
GEO. U. PORTER, *Secretary.*
GEO. P. THOMAS,
JOHN F. HUNTER,
THOS. BOND,
N. RUFUS GILL,
WM. A. MARBURG,
Commissioners.

WATER REGISTRAR'S REPORT.

REPORT.

WATER REGISTRAR'S OFFICE—CITY HALL,
BALTIMORE, December 31, 1883.

To the Honorable the President
and Members of the Water Board:

GENTLEMEN:

The following statements made, in compliance of City Ordinance No. 10, Section 8, will show the receipts and disbursements of the Registrar's Department for the year 1883, and the sources from which the revenue was received.

The receipts for the year were as follows:

From water rents, 1883	$401,812 14
" " 1882	137,910 11
" " 1881	4,790 07
" " 1880	3,892 72
From meter rents	68,786 88
	$617,191 92
Less discount on 1883 water rents	33,517 00
	$583,674 92

Amount brought forward	$583,674 92
From plumbing bills	22,679 12
" interest on water rents	2,510 95
" distributing main	217 67
" Gunpowder real estate	1,027 00
" Lake Roland	309 71
" Lake Montebello	9 40
" Loch Raven	108 60
" Jones' Falls Conduit	6 00
" Mount Royal Reservoir	10 50
" Hampden Reservoir	51 00
" Pump-house	7 15
" Real estate	500 00
Net receipts	$611,112 02
Appropriation for fire-plugs, fountains, and extra mains	5,000 00
Commissioners of Finance	7,000 00
Water stock	500,000 00
Of the above water stock, this amount transferred to Water Board	199,019 29
	$1,322,131 31
Add amount of discount allowed on 1883 water rents	33,517 00
Gross receipts	$1,355,648 31

The disbursements for the year were as follows:

Paid plumbing department	$11,699 58
" repairs	6,005 98
" Lake Roland	3,617 86
Amount carried forward	$21,323 42

	Amount brought forward	$21,323 42
Paid	salaries Registrar's Department	20,499 60
"	" Engineer's "	10,372 00
"	pump-house	13,000 64
"	temporary supply	683 78
"	water meters	3,718 03
"	current expenses	4,386 20
"	Druid Lake	3,473 45
"	Printing and stationery	1,617 51
"	High Service Reservoir	230 01
"	Hampden Reservoir	1,124 28
"	Mount Royal	1,322 18
"	Jones' Falls conduit	63 92
"	Loch Raven	7,261 33
"	Lake Montebello	8,720 96
"	water courses	1,119 96
	Working expenses	$98,917 27
"	Gunpowder permanent supply	2,800 00
"	Lake Clifton	27,146 10
"	distributing main	29,635 21
"	fire-plugs, pumps and fountains	4,303 90
"	returned money	1,535 96
"	real estate and water rights	250 00
"	Gunpowder real estate	48 50
"	tools and fixtures	286 15
"	water meters	1,933 19
"	Lake Clifton distributing main	96,988 57
		$263,844 85
"	Mayor and City Council loan	145,000 00
"	Commissioners of Finance	7,000 00
"	Water Board from Lake Clifton water stock	199,019 29
		$614,864 14

Amount brought forward.....	$614,864 14
Paid interest on water stock.....	459,296 66
	$1,074,160 80

Statement E will show the receipt of $199,019.29, part of the water loan of 1922. This sum was in part payment of advances made by the Water Department from its revenue to Lake Clifton in the years 1879, 1880, 1881, 1882 and 1883.

In July, 1883, $64,019.24 for advances made during that year, and to the time of payment.

In October, 1883, $135,000 in part payment for advances made in the years 1879, 1880, 1881 and 1882.

Statement L gives the revenue per ledgers January 1, 1884, to be $522,533.04; this sum as compared with statement L in report of 1882 shows a decrease of $80,291.74; this reduction is made by Ordinance No. 90, approved October 10, 1883, which is, however, provided for in part by a tax of three cents upon every hundred dollars of assessable property in the city of Baltimore.

The following statements show in detail the financial transactions of the department for the year 1883:

Statement A, Water Registrar's cash account.
" B, " " disbursement account.
" C, trial balance, general ledger.
" D, balance sheet.
" E, receipts.
" F, disbursements.
" G, new supplies.

Statement H, abatements.
" I, comparative receipts.
" K, balances remaining on the books of the Department December 31, 1883.
" L, revenue.

Respectfully submitted,

E. SHRIVER,
Water Registrar.

STATEMENTS.

STATEMENT A.

Water Registrar's Cash Account for the year 1883.

	Dr.	Cr.
To balance on hand December 31, 1882.....	$ 1,972 96	
To water rents, 1883.....$401,812 14		
Less discount. 33,517 00		
	368,295 14	
To water rents 1882.....	137,910 11	
" " 1881.....	4,790 07	
" " 1880.....	3,892 72	
To meter rents.....	68,786 88	
To plumbing bills.....	22,679 12	
To interest.....	2,510 95	
To distributing main.....	217 67	
To Gunpowder real estate.	1,027 00	
To Lake Roland.....	309 71	
To Jones' Falls Conduit..	6 00	
To Mt. Royal Reservoir..	10 50	
To Hampden Reservoir..	51 00	
To pump-house.....	7 15	
To real estate and water rights.....	500 00	
To Lake Montebello.....	9 40	
To Loch Raven.....	108 60	
To water stock.....	500,000 00	
Amount carried forward	$1,113,084 98	

STATEMENT A—Concluded.

	Dr.	Cr.
Amount brought forward	$1,113,084 98	
To transfers from water stock to Water Board...	199,019 29	
To Commissioners of Finance loan.....	7,000 00	
To appropriation for fireplugs, fountains and extra mains.....	5,000 00	
By daily deposits with City Register from January 2d to December 31, 1883.....		$822,114 92
By sale of water stock...		500,000 00
By balance on hand December 31, 1883.....		1,989 35
	$1,324,104 27	$1,324,104 27

STATEMENT B.

Water Registrar's Disbursement Account for the year 1883.

	Dr.	Cr.
To Water Board warrants drawn on City Comptroller from January 5 to December 28, 1883..	$1,074,160 80	
By Gunpowder permanent supply		$2,800 00
By Lake Clifton		27,146 10
By distributing main		29,635 21
By pumps and fountains.		1,642 01
By fire-plugs		2,661 89
By returned money		1,535 96
By real estate and water rights		250 00
By Gunpowder real estate.		48 50
By tools and fixtures		286 15
By water meters		5,651 22
By Lake Roland		3,617 86
By salaries Registrar's department		20,499 60
By salaries Engineer's department		10,372 00
By plumbing department.		11,699 58
By pump-house		13,000 64
By repairs		6,005 98
Amounts carried forward.	$1,074,160 80	$136,852 70

STATEMENT B—Concluded.

	Dr.	Cr.
Amounts brought forward	$1,074,160 80	$136,852 70
By temporary supply....		683 78
By current expenses.....		4,386 20
By Druid Lake.....		3,473 45
By printing and stationery.		1,617 51
By High Service reservoir.		230 01
By Hampden Reservoir..		1,124 28
By Mt. Royal Reservoir..		1,322 18
By Jones' Falls Conduit..		63 92
By Loch Raven.....		7,261 33
By Lake Montebello.....		8,720 96
By water courses.....		1,119 96
By Lake Clifton distributing mains.....		96,988 57
By Mayor and City Council loan account.....		145,000 00
By Commissioners of Finance.....		7,000 00
By transfers from water stock to Water Board..		199,019 29
By interest on water stock.		459,296 66
	$1,074,160 80	$1,074,160 80

STATEMENT C.

Dr. *Trial Balance, General*

6	Real estate and water rights	$770,844 78
9	Construction of new work	2,775,551 95
23	Mayor and City Council	271,050 14
73	Water Registrar's cash	1,989 35
112	Gunpowder permanent supply	4,117,914 50
114	Lake Clifton	257,065 64
120	Gunpowder real estate and water rights	228,969 24
124	Distributing main	1,726,235 28
132	Permanent supply distributing main	379,885 93
135	Lake Clifton distributing main	96,988 57
144	Water meters	31,035 19
152	Tools and fixtures	6,540 91
162	Repairs	6,005 98
172	Fire-plugs	1,661 89
180	Pumps and fountains	642 01
186	Lake Roland	3,308 15
192	Druid Lake	3,473 45
196	High Service Reservoir	230 01
200	Hampden Reservoir	1,073 28
204	Mount Royal Reservoir	1,311 68
208	Pump-house	12,993 49
214	Temporary supply	683 78
220	Current expenses	4,386 20
230	Stationery and printing	1,617 51
232	Engineer's department	10,372 00
242	Registrar's department	20,499 60
246	Returned money	1,535 96
300	Loch Raven	7,152 73
311	Lake Montebello	8,711 56
320	Water Courses	1,119 96
326	Jones' Falls conduit	57 92
408	Discount	33,517 00
		$10,784,425 64

STATEMENT C.

Ledger, December 31, 1883. Cr.

2	City six per cent. water stock.....	$263,000 00
3	City five per cent. water stock....	8,737,000 00
3	City four per cent. water stock....	500,000 00
4	Profit and loss.....	653,743 23
260	Plumbing department.....	10,979 54
362	Interest.....	2,510 95
432	Meter Rents.....	68,786 88
524	1883 water rents.....	401,812 14
457	1882 " "	137,910 11
480	1881 " "	4,790 07
508	1880 " "	3,892 72
		$10,784,425 64

STATEMENT D.

Dr. *Balance Sheet, General*

6	Real estate and water rights.....	$770,844 78
9	Construction of new work.....	2,775,551 95
23	Mayor and City Council....	271,050 14
73	Water Registrar's cash account....	1,989 35
112	Gunpowder permanent supply....	4,117,914 50
114	Lake Clifton.....	257,065 64
120	Gunpowder real estate and water rights.....	228,969 24
124	Distributing main.....	1,723,826 30
132	Permanent supply distributing main.....	379,885 93
135	Lake Clifton distributing main...	96,988 57
144	Water meters.....	24,602 09
152	Tools and fixtures.....	6,540 91
		$10,655,229 40

STATEMENT D.

Ledger, December 31, 1883. CR.

2	City six per cent water stock.....	$263,000 00
3	" five " " " "	8,737,000 00
3	" four " " " "	500,000 00
4	Profit and Loss.....	1,155,229 40
		$10,655,229 40

STATEMENT E.

Receipts of the Water Department for the Year 1883.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Water rents, 1883	$75,043 12	$213,722 78	$35,560 75	$12,335 01	$7,096 20	$5,871 17	$4,669 86	$7,069 73	$6,820 77	$6,792 79	$6,489 14	$20,340 82	$401,812 14
" " 1882	25,137 26	14,431 99	12,912 08	47,257 85	13,961 34	8,300 91	10,815 37	2,459 93	1,209 01	573 34	443 00	408 03	137,910 11
" " 1881	399 13	455 30	503 75	844 50	529 55	461 00	659 50	296 93	297 50	121 58	105 83	115 50	4,790 07
" " 1880	169 50	457 95	501 84	537 42	320 33	316 08	628 13	472 96	196 38	51 00	143 63	97 50	3,892 72
Interest	29 41	133 53	185 05	817 25	324 41	256 14	405 65	139 40	111 45	49 47	30 87	28 32	2,510 95
Plumbing bills	1,661 34	711 06	1,373 24	1,256 02	2,778 29	1,817 78	3,157 25	1,749 06	2,863 36	2,035 91	1,924 25	1,351 56	22,679 12
Meter bills	17,268 77	53 60	4 21	15,349 48	304 97	23 09	16,800 54	305 97	28 34	18,146 66	385 47	115 78	68,786 88
Distributing main	6 00	6 00	6 00	6 00	26 19	6 00	6 00	6 00	6 00	3 00	6 00	134 48	217 67
Gunpowder real estate		6 00	250 00	21 00		250 00			250 00			250 00	1,027 00
Lake Roland		25 05	36 00		97 72	35 75					71 94	43 25	309 71
Lake Montebello		8 40							1 00				9 40
Loch Raven		22 20	8 00	20 40		8 00			26 00	8 00	8 00	8 00	108 60
Jones' Falls conduit									6 00				6 00
Mount Royal Reservoir									10 50				10 50
Hampden Reservoir									31 00			20 00	51 00
Pump House									7 15				7 15
Real estate and water rights												500 00	500 00
	$119,714 53	$230,033 86	$51,340 92	$78,444 93	$25,439 00	$17,345 92	$37,142 30	$12,499 98	$11,861 46	$27,781 75	$9,608 13	$23,413 24	$644,629 02

Received from sale of water stock for Lake Clifton and Lake Clifton mains	500,000 00
" transfer from above stock for Water Board account (July 10, $64,019.29; October 31, $135,000.00)	199,019 29
" from Commissioners of Finance, loan	7,000 00
" appropriation for fire-plugs, fountains and extra mains	5,000 00
Total receipts for the year	$1,355,648 31

STATEMENT F.

Disbursements of the Water Department for the Year 1883.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTALS.
Gunpowder permanent supply				$2,500 00								$300 00	$2,800 00
Lake Clifton	$106 46	$104 96	$96 96	319 57	$1,826 32	$6,049 93	$4,300 03	$3,196 38	$4,603 14	$3,283 40	$2,520 85	738 10	27,146 10
Distributing main	740 24	1,114 44	781 09	6,389 61	2,862 20	3,632 23	3,942 49	1,816 83	2,072 09	1,798 56	3,573 77	911 66	29,635 21
Pumps and fountains	80 00	88 58	125 16	125 25	97 38	293 07	170 04	108 68	149 21	139 68	167 76	97 20	1,642 01
Fire-plugs	360 06	326 22	154 52	44 00	73 25	210 25	194 63	232 48	134 67	64 09	330 48	537 24	2,661 89
Returned money	45 53	260 18	51 77	371 89	192 90	224 23	54 31	111 90	56 48	42 38	92 64	31 75	1,535 96
Real estate and water rights		250 00											250 00
Gunpowder real estate and water rights												48 50	48 50
Tools and fixtures	36 15	59 88	22 68	15 83	23 84	14 01	7 62	33 47	15 76	11 35	33 06	12 50	286 15
Water meters	711 64	545 24	505 65	376 64	367 56	500 18	468 77	387 52	665 96	395 03	459 01	268 02	5,651 22
Lake Roland	141 70	67 20	121 41	125 78	196 05	468 74	273 41	659 75	384 34	365 94	444 60	368 91	3,617 86
Salaries, Registrar's Department	1,708 30	1,708 30	1,708 30	1,708 30	1,708 30	1,708 30	1,708 30	1,708 30	1,708 30	1,708 30	1,708 30	1,708 30	20,499 60
" Engineer's Department	908 32	949 98	949 98	949 98	949 98	949 98	949 98	752 76	752 76	752 76	752 76	752 76	10,372 00
Plumbing Department	602 41	577 38	771 03	927 90	774 92	1,713 03	1,010 05	1,222 82	923 92	1,006 21	1,473 50	696 41	11,699 58
Pump house	535 62	616 16	536 69	1,266 58	939 22	1,672 07	695 40	1,811 20	927 95	2,060 51	1,366 50	572 74	13,000 64
Repairs	469 04	562 71	555 19	259 50	240 24	295 18	295 13	402 34	421 42	838 95	1,030 35	635 93	6,005 98
Temporary supply	50 00	50 00	52 25	51 60	50 00	50 00	50 00	50 00	50 00	50 00	88 33	91 60	683 78
Current expenses	441 78	1,229 23	278 93	287 72	335 11	279 67	342 40	175 64	198 20	242 56	229 54	345 42	4,386 20
Druid Lake	103 74	205 40	454 50	567 76	407 88	457 18	290 00	195 23	177 99	186 74	211 43	215 60	3,473 45
Printing and stationery	206 65	194 98	186 35	48 32	46 84	269 93	4 75	47 15	253 00	28 76	284 70	46 08	1,617 51
High Service Reservoir	10 00	15 00	11 50	20 00	10 00	19 50	32 50	46 33	20 00	23 68	10 00	11 50	230 01
Hampden Reservoir	40 00	40 00	46 20	40 00	46 25	88 54	84 05	99 22	492 27	61 75	46 00	40 00	1,124 28
Mount Royal Reservoir	61 60	63 17	85 78	53 16	87 75	107 53	107 19	86 07	67 10	456 98	94 25	51 60	1,322 18
Jones' Falls conduit							36 52		27 40				63 92
Loch Raven	648 85	191 00	203 94	221 73	1,053 26	640 25	1,352 72	512 21	560 11	593 65	614 89	638 72	7,261 33
Lake Montebello	1,737 52	615 66	410 81	349 88	709 82	837 01	541 10	429 36	400 38	604 39	876 20	1,208 83	8,720 96
Water courses	83 33	83 33	113 33	83 33	83 33	113 33	83 33	83 33	113 33	83 33	83 33	113 33	1,119 96
Lake Clifton distributing mains	13 75	172 81	9,376 80	15,713 20	21,670 86	8,567 67	5,314 04	11,690 88	9,799 37	6,417 25	7,587 50	664 44	96,988 57
Mayor and City Council, loan account	35,000 00	110,000 00											145,000 00
Commissioners of Finance							7,000 00						7,000 00
Water stock, 1922, transfer warrants							64,019 29			135,000 00			199,019 29
	$44,842 69	$120,091 81	$17,600 82	$32,817 53	$34,753 26	$29,161 81	$93,328 08	$25,889 85	$24,975 15	$156,216 25	$24,079 75	$11,107 14	$614,864 14
Paid twelve months' interest on $9,000,000 water stock													452,630 00
" four " " " 500,000 " "													6,666 66
													$1,074,160 80

STATEMENT G.

New Supplies for the Year 1883.

691	houses,	@	$5 00..	$3,455 00	
715	"	@	7 50..	5,362 50	
523	"	@	9 00..	4,707 00	
155	"	@	12 00..	1,860 00	
22	"	@	14 00..	308 00	
2106					$15,692 50
15	warehouses,	@	$6 00..	$90 00	
6	"	@	8 00..	48 00	
31	"	@	10 00..	310 00	
52					448 00
1018	baths,	@	$2 00..	$2,036 00	
666	water closets,	@	2 00..	1,332 00	
309	hose,	@	3 00..	927 00	
64	horses,	@	1 50..	96 00	
19	carriages,	@	1 50..	28 50	
7	cows,	@	1 00..	7 00	
					4,426 50
	SPECIALS.				
7	bars,	@	$3 00..	$21 00	
11	"	@	5 00..	55 00	
	Amounts carried forward.....			$76 00	$20,567 00

STATEMENT G--Continued.

Amounts brought forward.....			$76 00	$20,567 00
18 urinals,	@	$1 50..	27 00	
16 forges,	@	2 50..	40 00	
1 shoe factory,	@	10 00..	10 00	
8 churches,	@	10 00..	80 00	
1 florist,	@	20 00..	20 00	
1 foundry,	@	10 00..	10 00	
5 extra families,	@	2 00..	10 00	
1 fountain,	@	10 00..	10 00	
5 barbers,	@	3 00..	15 00	
1 dyer,	@	5 00..	5 00	
1 Errick pump,	@	6 00..	6 00	
1 candy manufacturer,	@	10 00..	10 00	
1 butchery,	@	5 00..	5 00	
1 bottling establishment,	@	10 00..	10 00	
1 oyster establishment,	@	5 00..	5 00	
1 oyster establishment,	@	15 00..	15 00	
1 packing (fruit) establishment,	@	50 00..	50 00	
2 gas engines,	@	10 00..	20 00	
1 special rent,			9 00	
1 " "			25 00	
Amounts carried forward.....			$458 00	$20,567 00

STATEMENT G—Concluded.

Amounts brought forward.....			$458 00	$20,567 00
1 special rent,			50 00	
2 " "	@	$10 00..	20 00	
1 " "			125 00	
1 " "			175 00	
1 1 H. P. boiler,	@	$5 00 per ea H. P. B.	5 00	
2 ea 3 H. P. boiler,		"	30 00	
2 " 15 " "		"	150 00	
3 " 6 " "		"	90 00	
2 " 8 " "		"	80 00	
3 " 10 " "		"	150 00	
1 " 20 " "		"	100 00	
1 " 22 " "		"	110 00	
1 " 30 " "		"	150 00	
2 " 45 " "		"	450 00	
10 motors,	@	25 00..	250 00	
2 "	@	50 00..	100 00	
				$2,493 00
				$23,060 00

STATEMENT H.

Abatements Condensed for the year 1883.

	1880.		1881.		1882.		1883.	
Vacancies	24	$272 50	45	$488 46	188	$1,979 84	142	$987 03
Extra families	...	...	1	2 00	7	10 30	17	34 00
Duplicates and torn down	58	621 30	112	1,755 58	234	3,219 55	231	3,782 36
Specials	4	124 00	13	506 00	36	788 07	87	1,820 08
Horses	8	12 00	40	57 75	127	189 25	410	616 00
Carriages	1	1 50	11	15 50	34	50 25	116	172 50
Rents reduced	1	4 00	6	20 50	34	228 03	86	643 50
Hose	3	9 00	17	51 00	45	134 75	121	483 00
Baths	1	2 00	6	12 00	40	78 50	112	222 68
Water closets	2	4 00	5	10 00	15	60 00	72	144 00
Cows	...	...	11	11 00	26	26 00	67	66 50
Bars	...	...	...	...	14	49 84	63	233 50
Urinals	...	...	...	...	4	6 00	4	7 00
		$1,050 30		$2,929 79		$6,820 38		$9,212 15

Total amount of abatements for the year.....$20,012.62.

STATEMENT I.

Comparative Statement of Receipts for the Years 1881, 1882 *and* 1883.

— 1881. —		— 1882. —		— 1883. —	
1881 water rents	$373,316 32	1882 water rents	$387,836 16	1883 water rents	$401,812 14
1880 " "	141,851 12	1881 " "	140,562 94	1882 " "	137,910 11
1879 " "	13,710 11	1880 " "	9,499 73	1881 " "	4,790 07
1878 " "	9,675 06	1879 " "	5,865 40	1880 " "	3,892 72
Meter rents	57,853 12	Meter rents	61,827 31	Meter bills	68,786 88
	$596,405 73		$605,591 54		$617,191 92
Less discount on 1881 water rents	31,274 03	Less discount on 1882 water rents	32,098 77	Less discount on 1883 water rents	33,517 00
	$565,131 70		$573,492 77		$583,674 92
Plumbing bills	24,908 35	Plumbing bills	24,612 01	Plumbing bills	22,679 12
Interest on back water rents	4,498 16	Interest on back water rents	3,318 57	Interest on back water rents	2,510 95
Gunpowder real estate	3,122 08	Gunpowder real estate	1,040 80	Distributing main	217 67
Real estate	500 00	Real estate	500 00	Gunpowder real estate	1,027 00
Distributing main	566 66	Distributing main	825 39	Lake Roland	309 71
Lake Roland	258 50	Lake Roland	233 02	Lake Montebello	9 40
Pump house	4 30	Pump house	4 75	Loch Raven	108 60
Hampden Reservoir	45 00	Hampden Reservoir	15 00	Jones' Falls conduit	6 00
Lake Clifton	30 64	Lake Clifton	50 51	Mount Royal Reservoir	10 50
Druid Lake	60 00	Mount Royal Reservoir	2 00	Hampden Reservoir	51 00
Mount Royal Reservoir	28 00	Conduit	15 00	Pump house	7 15
Permanent supply distributing main	29 59	Lake Montebello	46 00	Real estate	500 00
Permanent supply	30 77	Engineer's Department	85 00		
Water meters	1 36	Loch Raven	64 50		
Pumps and fountains	3 00				
Conduit	5 00				
	$599,223 11		$604,305 32		$611,112 02
Profit and loss	7,000 00	Permanent supply	808 29	Appropriation for fire-plugs, fountains and extra mains	5,000 00
Appropriation for laying mains	7,650 00	Appropriation for laying main	4,000 00	Commissioners of Finance	7,000 00
" " drinking fountains	700 00	" " removing pump	25 00	Water stock for Lake Clifton	500,000 00
Commissioners of Finance	125,000 00	Mayor and City Council loan	145,000 00		
Net receipts	$739,573 11	Net receipts	$754,138 61	Net receipts	$1,123,112 02

STATEMENT K.

Balances remaining on the Books of the Department December 31, 1883.

1883 water rents	$146,753 05
1882 " "	16,853 70
1881 " "	7,048 16
Plumbing bills	4,321 47
Meter bills	70 09
	$175,046 47

STATEMENT L.

Revenue per Ledgers, January 1, 1884.

13,464	Houses	at $3 00	$40,392 00		
15,783	"	" 6 00	94,698 00		
14,471	"	" 9 00	130,239 00		
6,888	"	" 12 00	82,656 00		
2,616	"	" 14 00	36,624 00		
53,222	"			$384,609	00
258	Warehouses	" 6 00	$1,548 00		
403	"	" 8 00	3,224 00		
973	"	" 10 00	9,730 00		
				14,502	00
54,856				$399,111	00
5,197	Hose	" 3 00	$15,591 00		
1,859	Horses	" 1 50	2,788 50		
				$18,379	50
283	Boilers, at per H. P.	5 00		14,324	00
	Specials, embracing bars, bakeries, drugs, butcheries, motors, &c...			21,879	60
707	Meters.....			68,838	94
				$522,533	04

CHIEF ENGINEER'S REPORT.

REPORT.

OFFICE OF THE CHIEF ENGINEER—CITY HALL,

BALTIMORE, January 1, 1884.

To the Honorable the President
and Members of the Water Board:

GENTLEMEN:

I respectfully beg leave to present my annual report of the operations of the Engineer Department, and of the works in charge, for the year ending December 31, 1883.

MECHANICAL DEPARTMENT.

The force in this department were employed during the year in fitting up and repairing stop-cocks, fire-plugs, fountains, &c. The work done was very satisfactory in quantity and quality.

PLUMBING.

In the laying of service-pipes, for domestic use, from the mains to the street curbs, a considerable increase is shown over last year.

The number of new supplies laid in 1883 was 4,362, from which an additional annual revenue of $23,060 will be derived.

DISTRIBUTING MAINS.

The cast-iron pipes, of sizes 1½, 2, 3, 4, 6, 8, 10, 20 and 30 inches, for use during the year 1883, were furnished by R. D. Wood & Co., of Philadelphia. The 1½, 3, 4 and 6-inch sizes fell short of the approximate estimate, and an additional quantity had to be obtained before the close of the year.

The 20 and 30-inch pipes were not furnished as fast as we could lay them, hence the delay in their delivery increased the cost of laying them.

There were laid during the year 1883 $16\frac{4297\frac{1}{2}}{5280}$ miles in length of cast-iron pipes, of sizes from 1½ to 30 inches.

The pipe line to increase the supply of water to Bayview Asylum was commenced late in the season of 1882, and completed early in the year of 1883. This institution has now a much better water supply than it has had for some time, and it is as good a supply as can be obtained until other streets in the northeastern section of the city are extended, when a larger main can then be laid for its use.

Three lines of 20 and 30-inch cast-iron pipes were laid during the year 1883, as provided for by Ordinance No. 91 of the Mayor and City Council of Baltimore, approved May 25, 1882.

The amount expended under this ordinance for laying pipes during the year 1883 was $93,988.57. These lines are located in the south, southwest and northeast sections of the city.

In the southern section, commencing at Randall and Covington streets, there were laid 9,126 feet of 20-inch pipes, viz.: On Randall, Hanover, West, Howard, Conway, Little Paca and Paca streets to Camden street.

This line was completed and the water let into the pipes June 8, 1883.

In the southwestern section of the city, commencing at Paca and Lombard streets, there were laid 2,937 feet of 30-inch pipes, viz.: On Lombard, Fremont and Hollins streets to Poppleton street. At Hollins and Poppleton streets the 30-inch pipe was reduced to a 20-inch, and this was continued along Hollins street 2,511 feet to Stricker street.

This line was completed and the water let into the pipes August 9, 1883.

In the northeastern section, commencing at Harford and North avenues, there were laid 4,280 feet of 20-inch pipes on North avenue to Belair avenue.

At North and Belair avenues a 10-inch pipe, connecting with this 20-inch, has been laid along Belair avenue a distance of 1,912 feet to Federal street.

This line was completed and the water let into the pipes September 28, 1883.

The number of leaks in main pipes, of sizes from 2 to 40 inches, during the year were 466, and the number of leaks and repairs on main stop-cocks were 230.

The following is a copy of a resolution passed by the First Branch of the City Council in October, 1883, and which was referred to me by the Water Board:

"Resolved by the First Branch of the City Council of Baltimore, that the Water Board be and it is hereby requested to embody in its next annual report any suggestions its Chief Engineer may deem wise to make in order to secure an ample force of water to each and every section of the city for domestic uses, as well as for the extinguishment of conflagrations; and whether, in the judgment of the Board and its Chief Engineer, any separate system of mains would be desirable for the use of the Fire Department in any of the main thoroughfares; also the cost of the same, and any suggestions as to how the said cost may be met without resort to direct taxation, and any other information as to a more effective supply of water for all its various uses in all parts of the city."

In answer to the above resolution I beg leave to submit the following list, containing the names of the streets where pipe mains are needed, the lengths and sizes of pipes, together with the cost of laying:

Lexington, between Fulton and Fremont, 2,400 feet, 6-inch pipe	$3,460 00
Lexington, between Arch and Fremont, 1,285 feet 6-inch pipe	1,850 00
Saratoga, between Mount and Gilmor, 400 feet 4-inch pipe	320 00
Saratoga, between Fremont and Greene, 1,700 feet 6-inch pipe	2,450 00
Mulberry, between Poppleton and Fulton, 1,750 feet 4-ich pipe	1,400 00
Mulberry, between Fremont and Pine, 1,200 feet 6-inch pipe	1,730 00
Amount carried forward	$11,210 00

Amount brought forward	$11,210 00
Mulberry, between Pearl and Greene, 250 feet 6-inch pipe	360 00
Franklin, between Pearl and Brune, 1,718 feet 6-inch pipe	2,475 00
Pennsylvania avenue and Bloom street, 400 feet 4-inch pipe	320 00
Pennsylvania avenue and Presstman street, 565 feet 4-inch pipe	450 00
Pennsylvania avenue and Robert street, 315 feet 4-inch pipe	250 00
Pennsylvania avenue and Laurens street, 440 feet 4-inch pipe	350 00
Pennsylvania avenue and Pitcher street, 690 feet 6-inch pipe	1,000 00
Mosher, Argyle avenue, Dolphin, Harlem avenue, Schroeder and Mulberry to Carey, 5,075 feet 10-inch pipe	13,540 00
Lexington, Liberty, Cathedral to Cathedral alley, 1,125 feet 6-inch pipe	1,620 00
Lanvale, Aisquith to Biddle, 1,900 feet 8-inch pipe	4,050 00
Aisquith and Biddle, 375 feet 4-inch pipe	300 00
John and Valley, 750 feet 6-inch pipe	1,080 00
Biddle, Harford avenue and Hoffman, 650 feet 4-inch pipe	520 00
Camden, between Hanover and Light, 750 feet 8-inch pipe	1,600 00
Mill, between Pratt and Eastern avenue, 950 feet 8-inch pipe	2,030 00
	$41,155 00

The water supply for domestic uses and for fire service would be much improved in the above localities by the laying of these pipe mains.

FIRE-PLUGS.

The number of new fire-plugs erected during the year was 29, and of which 24 were erected upon new and 5 upon old sites. The total number of fire-plugs in the city is 916. An appropriation was made in 1883 by the mayor and City Council (being the first since 1877) for the erection of fire-plugs and fountains and for pumps.

PUMPS.

The number of pumps repaired during the year 1883 was 37, the number removed 26, and the number of wells filled up 21.

FOUNTAINS.

There are in the city 60 public fountains for the use of man and beast, and 18 for man only. There were 10 fountains erected during the year 1883.

METERS AND INDICATORS.

The number of meters in operation at the close of the year 1883 was 707, varying in size from ¾ to 4 inches. The number of new meters placed in operation during the past year was 60, and the number withdrawn and indicators substituted was 30.

The number of indicators in use upon elevators is 56. The quantity of water registered by meters and indicators during the year 1883 was 905,268,040 gallons,

being an increase of 42,504,304 gallons over the year 1882.

Our first experience with indicators upon hydraulic elevators was during last year.

We have had much trouble, as had been anticipated, by the bursting of the street mains from the shock given the column of water by the irregular working of the elevators. With proper safeguards, however, we hope to be able to obviate all difficulties that may arise in the future.

HIGH SERVICE PUMPING STATION AND RESERVOIR.

The aggregate number of hours that both sets of pumps were worked in 1883 was 5,048.

The amount of water pumped into the reservoir by both sets of pumps during the year 1883 was 797,615,710 gallons, an increase of 80,115,940 gallons over the year 1882.

The consumption of coal in 1883 was $1,552\frac{5}{2}\frac{0}{2}\frac{0}{4}\frac{0}{0}$ tons, and $23\frac{1}{2}$ cords of wood.

The average cost of pumping a thousand gallons of water in 1883 was .0163 cents.

The usual necessary repairs to the machinery during the year have been made by our own engineers.

The buildings and machinery at this pumping station are in very good condition.

The fountain in the upper part of Druid Lake was in operation $401\frac{1}{2}$ hours in 1883.

The High Service Reservoir, into which the water from the pumps is discharged, is in excellent condition. Its maintenance cost the department $230.01 for the year 1883.

LAKE ROLAND.

The water in this lake has been good during the past year. The greatest depth of water flowing over the dam was 12 inches, on June 27th.

The waste gates at the bottom of the lake have been opened whenever there was any water going over the dam.

The old plank fence on the west side of the lake and in the valley of Towson branch has been replaced by a wire fence.

The interior of the gate-house has been repainted and the slate roof repaired. The property here is in excellent condition.

JONES' FALLS CONDUIT.

This conduit has been flushed several times during the year by opening the waste gates at the Harper waste-weir. It has not been free of water for some time, consequently no examination of the interior could be made; the exterior has been, however, frequently examined and found to be in a good state of preservation.

HAMPDEN RESERVOIR.

The water has been clear and good in this reservoir all the year. The iron railing around the reservoir

and the inside of the gate-house have been repainted. The appearance of everything here is much better than it has been for some time.

PIPE LINES OF THE JONES' FALLS SUPPLY.

The four 30-inch pipe mains from Hampden Reservoir to Druid Lake, Mount Royal Reservoir and to the city limits are in good condition, and have been no expense to the department the past year.

DRUID LAKE.

Last March the water in this lake, and in the district of the city supplied by it, tasted badly, whilst everywhere else the water was good.

The waste gate at Druid Lake had not been opened to allow the water to flow out from the bottom, as had been done at the other lakes and reservoirs, but, when this was done, all of the bad taste disappeared in a short time.

Since then the waste gate has been frequently opened, and as much of the water at the bottom allowed to flow out in this way as possible.

The carriage-drive around Druid Lake is kept in order at the expense of the Water Department. It is the most attractive and more used than any other drive in Druid Hill Park; therefore, considerable attention is given it in order to keep it in its usual good repair.

The iron railing around the lake, the interior of the pump-house, stop-house, vault-house and tower have been repainted.

The grass slopes of the outside embankments have been improved with a top dressing of street sweepings.

MOUNT ROYAL RESERVOIR.

This reservoir still continues to receive its supply of water from the Gunpowder.

The only water that enters it from Jones' Falls is that through the fountain-pipe from Druid Lake.

The screen-well in the centre of the reservoir, the iron railing around it and the vault-house have been repainted.

A foot-way up the outer embankment slope, opposite the keeper's house, has been built to replace the worn-out wooden steps. The grass slopes of the outside embankment have been top dressed with street sweepings.

LOCH RAVEN.

The average flow of water over Loch Raven dam in 1883, when the supply gates to the city and the waste gates were open, was 4 inches in depth.

The maximum flow over the dam was on June 27th, when it reached 28 inches in depth. The water in this storage lake has been exceedingly good the past year.

A considerable amount of work has been done in grading and beautifying the margins of Loch Raven, also a great number of young trees have been transplanted from the surrounding woods to places where it is desirable to have a forest. A nursery containing five thousand evergreen trees of different varieties has been established on the east side of the lake.

The interior slopes of Loch Raven on both sides for some distance above the dam have been made flatter, and have also been riprapped at the water's edge, and above this riprapping sowed with grass-seed.

The carriage drive on the west side of the lake is being permanently constructed as fast as the interior slope is completed.

THE TUNNEL OR CONDUIT LINE FROM THE GUNPOWDER.

The interior of this tunnel, from Loch Raven to Lake Montebello, was inspected February 21, 1883, and found to be in as good a condition as when completed.

LAKE MONTEBELLO.

Clear water only is allowed to flow from Loch Raven through the tunnel into this lake. The storage supply in this lake is decreased by the city consumption whenever the water in Loch Raven is muddy. The lowest point the water reached below the high water mark in this lake was 13 feet, viz.: On February 24th and August 10th.

The water in Lake Montebello has been remarkably good the past year.

The Portland cement floor in the gate-house and the iron railing around the gate-chambers, which have been so long delayed, have been completed.

The pyrus japonica hedges around the lake on the inside and outside of the carriage drive, which I referred to in my last annual report, have been planted.

Considerable progress was made last year towards

the completion of the grading around Lake Montebello, which has remained so long in an unfinished state.

There is, however, little else to be done here, other than to finish the graveling of the carriage drive and the grading of the approaches to it.

The conduit connecting Lake Montebello with the gate-chambers at Lake Clifton, and the drain-tunnel conduit, on the north side of Lake Montebello, are in good order.

LAKE CLIFTON.

The Legislature of Maryland, during the session of 1882, empowered the Mayor and City Council of Baltimore to submit to the popular vote Ordinance No. 91, approved May 25th, 1882, authorizing the issue of city stock to the amount of $500,000 for the completion of Lake Clifton, etc. This ordinance was adopted by the people October 25th, 1882.

The contract for the completion of Lake Clifton was awarded to Charles Donoghue and James Donoghue, contractors, April 13th, 1883.

They failed to comply with the terms of their contract, and by virtue of the power in me vested I annulled their contract October 26th, 1883.

The work was relet November 23d, 1883, to Edward Heffner, Jr., Samuel W. Knapman and Charles A. Hook, contractors.

There was but little work done upon this lake during the year 1883.

The 40-inch pipe mains from the gate-chambers at Lake Clifton to the city limits are in very good condition.

TEMPORARY SUPPLY PUMPING STATION.

At this station nothing has been done since my last annual report. The property here is in charge of a watchman.

WATER COURSES.

The waters of the upper Gunpowder and Jones' Falls, and their tributaries, are daily inspected, in order that the pollution of the streams above our storage lakes may be immediately known.

Accompanying this report will be found the annual reports of Mr. James Curran and Mr. Wm. L. Kenly, giving, in detail, the operations of their respective divisions.

In conclusion, I take pleasure in referring to the efficiency of the officers and employees of this department in the performance of their respective duties during the past year.

Respectfully submitted,

ROBERT K. MARTIN,
Chief Engineer.

Engineer and Superintendent's Report,

CITY DIVISION.

REPORT.

OFFICE OF THE

ENGINEER AND SUPERINTENDENT--CITY DIVISION,

BALTIMORE, January 1, 1884.

R. K. MARTIN, ESQ., *Chief Engineer*
Baltimore City Water Department:

SIR:

I respectfully present the following report of the department under my supervision for the year 1883:

The approximate estimate made of the quantity of pipes required for use during the year 1883--although being much greater than our usual wants--fell short in the following sizes, viz.: $1\frac{1}{2}$, 3, 4 and 6-inch. The estimated number of 20 and 30-inch pipes required was from actual measurements over the lines where they were to be laid.

Our experience during the laying of these pipes has been that, the periodical delays in their delivery have added very much to their cost.

There has been laid for service and distribution $16\frac{4207\frac{1}{2}}{5280}$ miles of pipes, viz.:

18,760	feet	of	1½	inch	service	pipe.
1,256⅔	"	"	2	"	for distribution.	
12,105⅙	"	"	3	"	"	"
20,927⅓	"	"	4	"	"	"
11,673	"	"	6	"	"	"
3,872⅓	"	"	8	"	"	"
1,406	"	"	10	"	"	"
15,817	"	"	20	"	"	"
2,960	"	"	30	"	"	"

Total..88,777.6 feet.

At the close of 1882 we were working upon the pipe-line to increase the supply of water at Bayview Asylum. The greater part of this work was done in 1883, and which was as follows: 752 feet 4 inches of 6-inch pipes were laid on Eastern avenue; 1,208 feet 8 inches of 4-inch pipes along the east boundary of Patterson Park; 1,258 feet of 10-inch on Hudson street, and 1,418 feet of 8-inch pipes on Third avenue.

There were 1,418 feet of 4-inch pipe removed from Third avenue and re-laid on Eastern avenue.

There were 83 feet of 4-inch pipe, 61 feet of 3-inch and 318 feet of 1½-inch used for connections. This work was completed in order to permit Bayview Asylum to have the entire supply of water from the original 6-inch pipe, after it had passed Gist street and Eastern avenue.

We have removed 56 supplies from off of this 6-inch pipe on Eastern avenue. The 3-inch pipe at Highland avenue and the 3-inch pipe at Third avenue furnish the present supply to Highlandtown, north of Eastern

avenue. All the connections on these pipes have been changed to the pipes supplied from the Gunpowder.

This change will be readily understood when it is known that this Institution is now furnished with water from a supply having 54 feet greater head than what the supplies have in and around Highlandtown.

In the month of March we commenced to lay a 20-inch pipe line at the corner of Randall and Covington streets, thence along Hanover, West, Howard, Conway, Little Paca, and Paca to Camden street, a distance of 9,126 feet, which was completed, and the water turned on June 8th.

On August 24th we commenced to lay a 20-inch pipe line on North avenue, between Harford and Belair avenues, a distance of 4,280 feet. At Belair avenue a 10-inch pipe was connected and laid along said avenue to Federal street, a distance of 1,912 feet; these lines were put into service September 28th.

In laying the 20 and 30-inch pipes provision was made for one hundred and eleven branch connections at the different street crossings.

At Parkin, Poppleton, Schroeder, Oregon, Stockton alley, Carey, Stricker and Pratt streets connections were made requiring 72 feet of 2-inch, 348 feet of 3-inch, 302 feet of 4-inch, 1,585 feet of 6-inch, 750 feet of 8-inch, and 1,707 feet of 10-inch pipes, in order to make connections with other pipes.

SPECIAL PIPES LAID

1,307 feet of 4-inch at Highlandtown. Applicant paid cost.

347 feet of 4-inch on Fayette, between Paca and Eutaw, to supply fire-plug.

937 feet of 4-inch on Clement, between Boyle and Jackson streets, by resolution Mayor and City Council.

962 feet of 4 and 6-inch on Mosher, Chatsworth, Townsend and Lanvale, to give a better supply.

1,159 feet of 6-inch on Centre and Holliday, to give a better supply.

125 feet of 4-inch on Cairo street, to improve water.

579 feet of 6-inch on Richmond, Howard and Tyson, to give a better supply.

1,700 feet of 8-inch on Biddle and Cathedral, to flush 16-inch pipe.

748 feet of 8-inch on Conway, between Hanover and Light, to supply two fire-plugs.

6,217 feet of 3, 4 and 6-inch on Jefferson, Gist and Monument, per agreement to pay a fixed revenue.

333 feet of 6-inch on Frederick, between Lombard and Second, in lieu of old pipe.

A 30-inch pipe line was laid, commencing at Paca and Lombard streets, thence along Lombard, Fremont and Hollins streets to Poppleton street, a distance of of 2,937 feet. From Poppleton along Hollins to Stricker there was laid 2,511 feet of 20-inch pipes. Water was admitted to this line of pipes August 9th.

The number of main pipe leaks were 466 in pipes from 2 to 40 inches.

The number of main stop leaks were 230 in sizes from 2 to 28 inches.

The number of	fire-plugs repaired	249
"	" supplies turned off for leaks	203
"	" ferrules drawn off for leaks	94
"	" supplies turned off by order Registrar	937
"	" supplies turned on by order Registrar	547
"	" ferrules drawn by order Registrar	26
"	" ferrules returned by order Registrar	17
"	" square feet of paving done	345,215

The principal pipe leak which occurred during the year was on the 40-inch main on Washington street north of North avenue, caused by a blown joint.

A flow of water was also found discharging over a 40-inch pipe on Washington street near Gough, and after having worked night and day in excavating eleven holes to the bottom of the pipe (in a street that varied 43 feet in elevation in a distance of 500 feet), it was finally ascertained that the leak emanated from two broken service pipes. There was also a fracture discovered in a 30-inch pipe on Hollins, near Parkin street. This pipe had been in service only 60 days when a clear vertical fracture of about one-fourth its circumference appeared. There were also ten bursts in pipes of 4 and 4½ inches from the shock produced by hydraulic machinery.

FIRE-PLUGS.

There has been fire-plugs erected at the following-named streets during the year 1883, viz:

Presstman and Mount streets.
Walsh and Pitcher.
Mount and 10-foot alley north of Townsend.
*Eutaw and Biddle.
Fulton and Eagle.
Randall and Hanover.
Race and West.
Light and Conway, S. W. cor.
Light and Conway, N. W. cor.
*Hollins, between Stricker and Gilmor.
Fort avenue, between Steuart and Harper.
Fort avenue, between Harper and Neal.
Clement and Boyle.
Townsend and Upton.
Boundary and Belair avenues.
Front and Chestnut.
Holliday, between Bath and Centre.
Robert and Jordan alley.
*Buren and Liberty alley.
Fayette and Eutaw.
Light and Randall.
Read street, west of Charles.
Howard and West.
Eutaw and West.
*Fremont and Chatsworth.
*North side Belair avenue, near Federal street.
Front and East.
Holliday and Centre.
Calhoun and Cairo.

Total 29

Those marked thus * were erected in place of defective ones.

The total number of fire-plugs in the city is 916.

Erected in 1883 on new sites	24
" " " " old "	5

The number of fountains in the city is 88, of which 60 are constructed for the use of man and beast.

Fountains were erected at the following-named streets during the year 1883, viz:

Baltimore and Greene streets.
Front and Exeter.
Gilmor, Ramsey and Fulton avenue.
Madison and Buren.
Bath and Holliday.
Townsend and Pennsylvania avenue.
Chew and McDonough.
Charles and Monument.
Columbia avenue and Cross street.
Greenmount avenue and Madison.

PUMPS.

Number repaired	37
" removed	26
" wells filled up	21

The number of new supplies from December 31, 1882, to December 31, 1883, aggregated 4,362, and from which an annual revenue of $23,060 will be derived.

Amounts of bills delivered to Water Registrar for work done and for material sold, viz.:

Plumbing	$21,471 07
Distributing main	2,408 98

H. A. Ramsay, 10,635 lbs. scrap cast-iron,	@	¾c.	$79 76
Wm. Gisriel, 607 lbs. brass turnings,	@	9¼c.	56 14
W. Bollman, 13 $\frac{246}{2240}$ tons cast iron scrap,	@	$18..	235 98
To 13 oil barrels sold at pump-house,		..	7 15
Wm. Gisriel, 759 lbs. scrap brass,	@	10½c.	79 69
do. 574 " brass turnings,	@	8½c.	48 79
			$507 51

HIGH SERVICE PUMPING STATION.

The aggregate time that both sets of pumps were worked was 5,048 hours.

The amount of water pumped into the reservoir was 797,615,710 gallons.

There were on hand, as per inventory of January 1, 1883, 353 tons of coal and 7½ cords of wood. Since then there were 1,283 $\frac{800}{2240}$ tons of coal purchased, and 10 cords of wood received from off of the city property.

There is on hand, as per inventory of January 1, 1884, 84 tons of coal and 13 cords of wood, showing that there has been 1,552 $\frac{800}{2240}$ tons of coal, and 23½ cords of wood consumed during the past year.

The duty of the pumps has been as follows:

Consumption of coal in pounds.	Height of pumping, as shown by gauge on force main.	Gallons of water pumped.	Millions pounds raised one foot high with 100 pounds of coal.	Gallons of water pumped with 100 pounds of coal.	Gallons of water pumped with one pound of coal.	Reduced to a common standard of 100 feet.	Cost of pumping 1,000 gallons, in cents.
3,479,280	190	797 615,710	36.338,462	22.938	229.38	43,582	.0163

METERS.

There are seven hundred and seven meters in service, ranging in size from ¾ to 4 inches. Of this number, 60 were erected in 1883. There have been twenty-seven 3-inch and three 2-inch meters withdrawn and indicators substituted therefor. There are fifty-six indicators in opération at present, all of which have been substituted in the place of meters.

It will be remembered that there was much hesitation before the department assented to the changing of the meter for the indicator on hydraulic elevators.

When the consumers petitioned for this change it was given as the reason therefor that the meter obstructed the head of water. The department felt some anxiety in regard to this change, chiefly on account of the shock that the pipes would receive from the sudden stoppage of water by the hydraulic machinery.

Our experience up to the present time, in this respect, has proved that our apprehensions were well founded.

I only refer to this on account of there having been several casualties to the city water mains from this cause, and which was found, upon an investigation being made, to have originated from the shock given to the water when shut off, and which was, oftentimes, three times greater than the maximum pressure on the city mains.

The quantity of water registered by meters and indicators, together with how consumed, is as follows:

	Gallons.
Elevators having meters thereon	210,456,086
" " indicators "	33,458,108
Railroads, with meters	156,194,292
Distilleries, " "	22,252,252
Breweries, " "	78,241,969
Brick yards, " "	1,960,390
Coal oil refineries, " "	13,069,616
Drove yards, " "	7,743,792
Oyster and fruit packers, " "	59,900,104
Hotels and restaurants, " "	37,535,686
Livery stables, " "	7,791,128
Planing mills, " "	21,799,502
Miscellaneous, " "	254,865,115
	905,268,040

The total number of meters in operation, and their size is as follows:

224	meters	of	$\frac{3}{4}$	-inch
191	"	"	1	"
77	"	"	$1\frac{1}{2}$	"
50	"	"	2	"
161	"	"	3	"
4	"	"	$\frac{4}{4}$	"
Total .. 707				

The above are all of the "Worthington" patent, except one $\frac{3}{4}$-inch "Crown" meter.

EXPENDITURES FROM JANUARY 1, 1883, TO JANUARY 1, 1884.

Lake Clifton distributing main	$96,988 57
Distributing main	29,635 21
Salaries Engineer's Department	10,372 00
Plumbing	11,699 58
Pump-house	13,000 64
Repairs	6,005 98
Temporary supply	683 78
Water meters	5,651 22
Pumps and fountains	1,642 01
Fire-plugs	2,661 89
Tools and fixtures	286 15
	$178,627 03

MECHANICAL DEPARTMENT.

The force in this department consists of one pattern-maker, who was engaged 295¼ days on new patterns and on repairs; one machinist, constantly employed; one brass finisher; one machinist, whose time has been equally divided in proving pipes and shop-work; one machinist, whose time is divided between erecting meters, repairs and shop-work; one man on drill-press and screw-cutting machine; one blacksmith and one helper.

The work done in this department, as regards to the quantity and quality, has been of the most satisfactory character.

The deportment and attention of the men engaged could not have been better, which is highly appreciated.

NEW PATTERNS CONSTRUCTED DURING THE YEAR 1883.

16x8-inch reducer,
10x2-inch reducer,
8x4, 8x3 and 8x2-inch reducers,
16-inch coupling,
10-inch coupling,
10-inch pipe end,
6-inch pipe end,
4-inch, 3-inch and 2-inch pipe ends,
2-inch $\frac{1}{16}$th bend,
New 2-inch cap,
New brass valves for 3 and 4-inch stops,
$1\frac{1}{2}$-inch stop,
Brass meter strainer,
Meter counter top,
$\frac{5}{8}$ brass thimble,
4-inch pressure regulating valve,
Casing for gate screws at Lake Roland,
Manhole frame and cover for boilers at pump-house,
General overhauling and additions to patterns, particularly 30-inch, 20-inch and 16-inch stops,
1 30-ich clamp at Lombard and Fremont streets.

STATEMENT OF WORK CONSTRUCTED DURING THE YEAR 1883.

1 30-inch stop,
5 20-inch stops,
2 16 " "
7 10 " "
1 8 " "
57 6 " "
36 6 " " partly completed,

78 4-inch stops,
24 4 " " partly completed,
75 3 " "
36 3 " " partly completed,
24 2 " "
12 2 " " partly completed,
7 plug-stops,
12 standard-size fire-plugs,
18 " " " " partly completed,
12 improved-style fire-plugs,
3 fountains—partly completed,
1 1½-inch stop,
2 30-inch plain clamps,
5 30x4-inch clamps,
2 30x3 " "
1 30x2 " "
2 20x3 " "
2 12x3 " "
2 10x4 " "
5 10x3 " "
7 6x3 " "
2 6x2 " "
12 3-inch ferrule clamps,
6 3-inch pipe clamps,
1 4-inch pressure regulating valve,
24 large extra plug caps,
12 small " " "
6 gallows stop screws,
432 1½-inch caps,
324 " bushings,
60 2-inch "

108 $\frac{1}{2}$-inch brass ferrule plugs,
36 $\frac{5}{8}$-inch " " "
48 " " thimbles,
36 $\frac{1}{2}$-inch " "
36 brass screws for ferrule clamps,
36 $\frac{3}{4}$-inch meter spuds,
24 1-inch " "
12 1$\frac{1}{2}$-inch " "
12 brass meter nuts,
3 " " valves,
4 extra balusters and washers for Montebello,
1 30-inch special clamp for Lombard and Fremont streets,
12 plug cones,
Extra plug screws, nuts and other fittings.

SHOP OPERATIONS, 1883.

	Wages Paid.	At Current Rates.	Difference.
Lake Clifton distributing main	$2,520 39	$4,768 99	$2,248 60
Distributing main	938 34	1,626 53	688 19
Plumbing Department	347 59	558 68	211 09
Meters	162 42	297 86	135 44
Fire-plugs	658 79	1,443 68	784 89
Fountains	33 09	69 25	36 16
Tools	175 86	292 66	116 80
Repairs	23 41	41 00	17 59
High service pump-house	60 78	108 28	47 50
Druid Lake	2 26	3 60	1 34
Hampden Reservoir	2 63	4 20	1 57
Lake Roland	18 96	30 03	11 07
Lake Montebello	303 60	456 16	152 56
	$5,248 12	$9,700 92	$4,452 80

Operating Expenses.

87 tons of coal for power and heating	$455 66	
4½ tons of coal for forge	22 50	
80 lbs. cotton waste	9 60	
30 gallons of lard oil	22 50	
Gas bills for entire building	183 88	
Engineer's wages	468 00	
Interest on cost of tools at 6 per cent	293 65	
Depreciation of tools, 2 per cent	97 88	
		1,553 67
A gain of		$2,899 13

INVENTORY.

Distributing main and pipe fittings	$7,857 62
Plumbing	506 70
Meters	703 25
Fountains	1,401 25
Fire-plugs	783 56
Shop, tools and fixtures	5,986 65

Respectfully submitted,

JAMES CURRAN,
Engineer and Superintendent.

STATEMENTS,

Engineer and Superintendent's Report,

CITY DIVISION.

TABULAR STATEMENT.

Size and Number of Feet of Pipe, Stop Cocks and Branches Laid in the City.

	1½ in.	2 in.	3 in.	4 in.	4½ in	6 in.	8 in.	10 in.	12 in.	16 in.	18 in.	20 in.	30 in.	TOTAL OF PIPE
No. of feet of pipe laid previous to purchase by Water Company		13,203	95,411	31,876	72,462	60,704	10,040	14,330	12,209	6,168	4,627	8,588	14,203	363,821
Laid by the Water Commissioners from July 1, 1855, to Dec 1857		1,909	14 720	28,362		50 005	613	448				9,716		60,773
By Water Board 1858		2,948	24 438	23 742		8,692	144							59,964
" " 1859		638	22 972	40 367		14,503		6,300	108					84,888
" " 1860			20,488	35,106		22,134		7.910				14,889	1,428	101,955
" " 1861		276	8,317	15,432		8,722		5,017				1,080	8,292	47,136
" " 1862		1,140	11,065	6,562		560				490		6,599	51	26,467
" " 1863		2,729	12,223	5.696		3,744		4,560		720	1,170	1,314		32,156
" " 1864	1,748	314	20,899	8,362		6,981		13,476	405	1,962	783	1,395		56,325
" " 1865	7,929	796	16,930	11,729		3,204								40,588
" " 1866	2,903	4,413	15,813	10,864		13,048								47,041
" " 1867	1,145	14,252	17,349	8 808		6,491½		9,372						57,417½
" " 1868	1,642	4,475½	20 466½	14,759½		2,012½								43,356
" " 1869	192	4,765	16 595	9,457½		4,037								35,046½
" " 1870		8,502	11,372	10,086		600								31,360
From Jan. 1 to Oct. 31, 1871		6,895	11,863	13,205		8,452								40,415
From Oct. 31, 1871, to Oct. 31, 1872	78	6,871½	13,660½	12-479		3,425								36,514
From Oct. 31, 1872, to Oct. 31, 1873		4,551	10,677½	8,032½		5,405		2,150		3,400				34,216
From Oct. 31, 1873, to Oct. 31, 1874	36	4,402	8,169	10,525		10,959	5,795	8,537½						48,723½

From Oct. 31, 1874, to Oct. 31, 1875	.....	3,542	7,544½	8,837½	.....	11,750	.....	4,362½	.....	.....	.....	11,160	8,959½	56 165
From Oct. 31, 1875, to Oct. 31, 1876	.....	1,982½	7,053½	15,383	.....	1,050	.....	3,212½	.....	5,175	.....	202½	7,215½	41 274½
From Oct. 31, 1876, to Oct. 31, 1877	.....	1,289	17,246½	15,571½	.....	7 462½	.....	75	137½	.....	.....	.....	.....	41.782
By Water Board 1878	175	1 603	7,567	11,579½	.....	3 000	.....	4 800	.....	837½	.....	425	3,312½	33,299½
" " 1879	.....	1,603	4,490	10,876	.....	3,160	.....	2,038½	.....	.....	.....	2,975	.....	25 142½
" " 1880	.....	1,882	5,057½	7,777¾	.....	5,459¼	.....	1 398	.....	.....	.....	.....	.....	21.574½
" " 1881	.....	933	9,034⅜	12,290½	.....	6 421⅝	1,797	3 169¼	.....	.....	.....	.....	.....	33,646¼
" " 1882	.....	1,058	8,423⅜	14,788	.....	4 522⅜	.....	4 964½	.....	.....	.....	.....	.....	33 756⅜
" " 1883	.....	1,269⅜	12,259	18,270	.....	13,295⅜	4,621⅜	5,026	.....	.....	.....	15,817	2,960.5	73 523½
	18 848	98 242½	452.105	422 625½	72.462	244.801	23 013⅜	101,146⅜	12 859½	38,782½	6,580	74,160.7	46,421.11	1 608 011 10

TABULAR STATEMENT—Continued.

	1½ in.	2 in.	3 in.	4 in.	4½ in.	6 in.	8 in.	10 in.	12 in.	16 in.	18 in.	20 in.	36 in.	Stops.
Stop Cocks by Water Company	.....	12	61	94	.....	55	9	8	8	9	4	8	2	270
" " " Commissioners	.....	9	8	8	.....	2	.....	.....	.....	.....	.....	2	.....	29
By Water Board 1858	.....	17	23	14	.....	3	1	.....	1	16	.....	1	.....	76
" " 1859	.....	15	30	54	.....	16	.....	7	.....	.....	.....	.....	.....	122
" " 1860	.....	.....	18	55	.....	36	.....	9	.....	.....	.....	4	1	123
" " 1861	.....	7	7	24	.....	8	.....	3	.....	.....	.....	.....	5	54
" " 1862	.....	21	19	31	.....	19	.....	1	.....	1	.....	4	.....	96
" " 1863	.....	7	20	28	.....	2	.....	2	.....	.....	.....	1	.....	61
" " 1864	.....	12	18	15	.....	4	.....	5	.....	.....	.....	1	.....	55
" " 1865	.....	24	13	6	.....	2	.....	.....	.....	.....	.....	.....	.....	45
" " 1866	.....	22	24	20	.....	4	.....	.....	.....	.....	.....	.....	.....	70
" " 1867	.....	46	22	5	.....	5	.....	3	.....	.....	.....	.....	.....	81
" " 1868	.....	7	24	19	.....	3	.....	.....	.....	.....	.....	.....	.....	53
" " 1869	.....	.....	7	18	.....	3	.....	.....	.....	.....	.....	.....	.....	28
" " 1870	.....	.....	4	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	11
January 1st to October 31st, 1871	.....	5	11	25	.....	5	.....	.....	.....	.....	.....	.....	.....	46
October 31st, 1871, to October 31st, 1872	.....	10	26	23	.....	3	.....	.....	.....	.....	.....	.....	.....	56
" " 1872, " " 1873	.....	7	14	25	.....	12	.....	2	.....	2	.....	.....	.....	62
" " 1873, " " 1874	.....	4	14	52	.....	9	6	6	.....	.....	.....	.....	.....	91
" " 1874, " " 1875	.....	3	5	31	.....	10	.....	6	.....	1	.....	6	2	64
" " 1875, " " 1876	.....	1	25	66	.....	52	2	.....	.....	1	.....	1	2	150
" " 1876, " " 1877	.....	5	69	50	.....	13	.....	2	.....	.....	.....	.....	.....	139
By Water Board 1878	.....	7	29	22	.....	2	.....	6	.....	4	.....	2	1	73
" " 1879	.....	4	15	37	.....	6	.....	2	.....	.....	.....	.....	.....	64
" " 1880	.....	3	9	24	.....	11	.....	1	.....	.....	.....	.....	2	54
" " 1881	.....	4	26	41	.....	6	2	2	.....	.....	.....	.....	.....	81
" " 1882	.....	5	27	36	.....	19	.....	5	.....	.....	.....	.....	.....	92
" " 1883	.....	4	50	91	.....	67	5	10	.....	2	.....	4	1	235
	.....	262	612	1021	.....	380	25	81	9	37	4	34	16	2381

TABULAR STATEMENT—Concluded.

	1½ in.	2 in.	3 in.	4 in.	4½ in.	6 in.	8 in.	10 in.	12 in.	16 in.	18 in.	20 in.	30 in.	B'l'hes
Branches by Water Board 1858	.....	3	78	98	.....	33	2	.....	.....	1	.....	.....	.....	215
" " 1859	.....	.....	53	134	.....	75	.....	32	2	.....	.....	.....	.....	296
" " 1860	.....	.....	68	108	.....	149	.....	29	.....	.....	.....	52	2	408
" " 1861	.....	.....	26	50	.....	33	.....	19	.....	.....	.....	6	34	168
" " 1862	.....	5	25	30	.....	4	.....	1	.....	.....	.....	16	.....	81
" " 1863	.....	3	29	15	.....	9	.....	7	.....	2	1	5	.....	75
" " 1864	3	3	40	21	.....	9	1	47	.....	5	4	4	.....	137
" " 1865	20	.....	47	20	.....	15	.....	.....	.....	.....	.....	.....	.....	102
" " 1866	3	.....	30	24	.....	16	.....	.....	.....	.....	.....	.....	.....	73
" " 1867	1	29	46	26	.....	7	.....	21	.....	.....	.....	.....	.....	130
" " 1868	1	6	38	43	.....	12	.....	.....	.....	.....	.....	.....	.....	100
" " 1869	.....	5	54	32	.....	6	.....	2	.....	.....	.....	.....	.....	99
" " 1870	.....	9	27	39	.....	1	.....	.....	.....	.....	.....	.....	.....	76
January 1st to October 31st, 1871	.....	6	22	29	.....	32	.....	.....	.....	.....	.....	.....	.....	89
October 31st, 1871, to October 31st, 1872	.....	3	35	39	.....	10	.....	.....	.....	.....	.....	.....	.....	87
" " 1872, " " 1873	.....	3	26	23	.....	14	.....	7	.....	5	.....	.....	.....	78
" " 1873, " " 1874	.....	4	17	53	.....	16	22	30	.....	1	.....	.....	.....	143
" " 1874, " " 1875	.....	5	14	26	.....	5	.....	13	.....	1	.....	29	8	101
" " 1875, " " 1876	.....	4	21	90	.....	12	.....	14	.....	21	.....	.....	9	171
" " 1876, " " 1877	.....	2	45	45	.....	23	1	3	.....	.....	.....	.....	.....	119
By Water Board 1878	.....	4	20	36	.....	8	.....	.....	.....	9	.....	3	4	84
" " 1879	.....	2	14	41	.....	6	.....	5	.....	.....	.....	.....	.....	68
" " 1880	.....	.....	9	35	.....	17	.....	11	.....	.....	.....	5	.....	77
" " 1881	.....	3	20	54	.....	11	5	7	.....	.....	.....	.....	.....	100
" " 1882	.....	1	24	74	.....	45	.....	21	.....	.....	.....	2	.....	167
" " 1883	.....	3	30	104	.....	86	13	15	.....	2	.....	54	10	317
	28	103	858	1293	.....	654	54	284	2	47	5	176	67	3561

Whole length of pipe line in the city, December 31st, 1882 ..... 290 miles, 2,294 7-12 feet.
Pipe line in the city from January 1st to December 31st, 1883 ..... 13 " 4,883 4-12 "
Whole length of pipe line in the city, December 31st, 1883 ..... 304 " 1,897 11-12 "
Net cost of pipe to date $2,021,253 88

Location, Size, Number of Feet, and Cost of Distributing Main, Laid from January 1, 1883, to December 31, 1883.

Streets in which Pipes are Laid.	Between what Streets.	Size in Inches.	Length in Feet.	Cost.
Presstman	Gilmor and Mount	6	394 2/3	$536 25
Mount	Presstman and Baker	4	172 2/3	
Rear Presstman	Mount and Fulton	3	197 1/3	
Towson	Fort avenue and Clement	4	111	85 83
Castle	McElderry and Monument	4	339 1/3	229 35
Rear Gay	Washington and Hoffman	2	97	45 15
Rear Central avenue	Hoffman and Oliver	3	76	44 10
Rear Mount	Townsend and Lanvale	3	61 2/3	35 06
Mount	Fayette and Lexington	4	175 2/3	102 12
Robert	Druid Hill avenue and Division	4	37	24 17
Hamburg	Scott and Paca	3	197 1/3	91 27
Union avenue	Harford avenue and Aisquith	3	353 1/3	197 22
Arch	German and Baltimore	3	132 2/3	63 02
Rear Baltimore	Mount and Gilmor	3	148	82 99
Charles	Shirk and Brown	4	234 1/3	168 41
Federal	Belair avenue and Washington	6	49 1/3	40 24
Rear Parish alley	Winchester and Tennant	3	123 1/3	58 18

Baltimore	Charles and St. Paul	10	148	272 35
Madeira alley	Jefferson and McElderry	3	61 2/3	32 34
Saratoga	Bruce alley and Fulton	4	148	127 22
Rear Fulton	Saratoga and Mulberry	3	24 2/3	
Walsh	Pitcher and Sewell	4	141 2/3	106 51
Aliceanna	Second and Third avenues	4	394 1/3	218 42
Watterman alley	Fremont and Pennsylvania ave.	3	135 2/3	66 41
Park avenue	North and Boundary ave.	6	371 1/4	287 08
Schroeder	Booth and Hollins	2	91 1/6	43 27
Mangood	Scott and Sterrett alley	3	64 2/3	47 70
Biddle	Ensor and Valley	4	179	231 10
Rear Wilcox	Biddle and Chase	4	283 2/3	
Durham	Baltimore and Lombard	3	100	64 22
Division	Boundary avenue and Baker	4	320 2/3	175 73
Valley	Eager and Chase	4	74	40 02
Short	McElderry and Jefferson	3	175	68 93
Rear Chase	Valley and Hillman	3	150	59 08
Pratt	Carey and Calhoun	6	33 2/3	80 08
Rear Calhoun	Pratt and Lemon	2	90	
Bloome	Madison ave and Morris alley	4	151	82 03
Morton alley	Preston and Hoffman	4	142 1/5	82 20
Rear Edmondson avenue	Schroeder and Fremont	3	57 1/2	24 95

Location, Size, Number of Feet, and Cost of Distributing Main, Laid from January 1, 1883, *to December* 31, 1883.

Streets in which Pipes are Laid.	Between what Streets	Size in Inches.	Length in Feet.	Cost.
Hudson	Eastern avenue and Third	10	1,258	$3,627 49
		4	83	
		3	61⅔	
Third	Hudson and Eastern avenue	8	1,418⅓	.....
Fulton	Ramsay and Eagle	4	875⅔	438 18
Rear Fairmount avenue	Chester and Castle	4	271⅓	165 82
Rear Chester	Hampstead and Boyer	3	62½	30 63
Rear Canton	Boston and Elliott	3	110½	41 86
Mulberry	Calvert and Hargrove alley	2	37	14 01
Boundary avenue	Eutaw street and Madison ave.	6	709	557 13
Townsend	Aiken and Hope	2	21	139 69
		4	259	
Mulberry	Gilmor and Vincent alley	4	185	100 58
Rear Gilmor	Mulberry and Franklin	3	200	91 28
Port alley	Canton avenue and Aliceanna	3	87½	36 58
Goodman alley	Clement and Fort avenue	4	148	74 93

Eighth street	Bank and Eastern avenue	2	417½	175 12
China alley	Hamburg and Henrietta	3	156	60 16
Rear Division	Robert and Presstman	3	150	139 57
		4	116	
Rear Light	Heath and Barney	3	150	54 59
Nicholson	Decatur and Haubert	4	98 3/32	54 18
Fayette	Paca and Eutaw	4	345⅓	212 03
Rear Townsend	Stockton alley and Carey	4	74	58 75
Eastern avenue	Second and Third avenues	4	925	112 61
Rear Fulton	Tennant and Mosher	4	185	87 82
Lancaster	Chesapeake and Binney	6	222	217 68
Rear Chesapeake	Lancaster and Hudson	3	162½	
Monument from	Eastern avenue, to Gist, to Jefferson to Washington	3	395	4,233 80
		4	143	
		6	5,679	
Eagle	Fulton and Monroe	4	141 3/32	89 28
Ramsay	Fulton and Monroe	4	24 3/32	
Rear George	Schroeder and Oregon	4	135 2/32	69 22
Payson	Lombard and Pratt	4	98 3/32	50 16
Read	Calvert and North	4	90	105 44
Calvert	Read and Eager	3	142½	

Location, Size, Number of Feet, and Cost of Distributing Main, Laid from January 1, 1883, to December 31, 1883.

Streets in which Pipes are Laid.	Between what Streets.	Size in Inches.	Length in Feet.	Cost.
Rear Ann	Chew and Madison	3	281	$160 05
Chew	Ann and Durham	4	74	
Charles	Madison and Monument	2	74	96 13
		4	123	
Rear Chase	Wolfe and Washington	4	61⅔	36 67
Gilmor	Ramsay and Cole	4	143	75 65
Peach alley	West and Cross	4	197⅓	116 31
Peach alley	West and Stockholm	4	24⅔	
Lombard	Sharp and Hanover	6	86⅓	82 55
Washington	Biddle and John	4	123⅓	127 79
Rear Biddle	Washington and Castle	4	102⅔	
Rear Mount	Tennant and Winchester	4	123⅓	135 48
Rear Tennant	Fulton and Mount	4	148	

Rear Mount	Tennant and Mosher	4	226	107 73
Rear Wolfe	Chew and Eager	4	197⅓	96 36
Rear Fulton	Mulberry and Saratoga	3	287½	91 08
Lancaster	Broadway and Bethel	3	50	30 56
Clairmount	First and Third	4	1,307⅓	726 99
Third	Clairmount and Lombard			
Clement	Jackson and Boyle	4	937⅓	449 43
Federal	Washington and Belair avenue	6	74	51 64
Eutaw	Mulberry and Saratoga	4	98⅔	66 63
Saratoga	Mount and Fulton	3	25	117 08
		4	176⅔	
Holbrook	Hoffman and John	3	112½	48 85
Low	Chestnut and East	3	50	23 60
Morton alley	Lanvale and Townsend	3	237½	88 87
Rear Haubert	Clement and Fort avenue	3	158½	142 11
Clement	Haubert and Hull	4	111	
Haubert	Clement and Fort avenue	4	234	117 67
Goodman alley	Fort avenue and Randall	3	125	53 43
Rear Fayette	Mount and Vincent alley	3	100	47 66
Rear Biddle	Valley and Holland alley	3	62½	27 01
Etting	Dolphin and Hoffman	3	112½	51 11
Rear Edmondson avenue	Vincent alley and Mount	4	10	45 97
		3	81	
Short	Jefferson and McElderry	3	50	23 68

Location, Size, Number of Feet, and Cost of Distributing Main, Laid from January 1, 1883, to December 31, 1883.

Streets in which Pipes are Laid.	Between what Streets.	Size in Inches.	Length in Feet.	Cost.
Rear Castle	Chew and Eager	3	375	$ 142 16
Towson	Clement and Beason	4	178⅔	90 56
Rear Mount	Schroeder and Lexington	3	37½	34 30
Dryden alley	Presstman and Robert	4	382¼	201 93
Rear Edmondson avenue	Schroeder and Oregon	4	61⅔	29 41
Rear Park avenue	Hoffman and Dolphin	3	250	116 65
Little Greene	Paca and Burgundy alley	4	4	73 05
		3	155	
Calvert	Lanvale and Townsend	4	24⅔	14 63
Fountain	Chester and Castle	2	25	14 93
Castle	Fairmount avenue and Fayette	3	62½	26 01
Cannon	Eastern avenue and Canton ave.	4	197⅓	116 15
Rear Calhoun	Pratt and McHenry	3	81	145 41
Rear Pratt	Calhoun and Norris alley	4	111	
Norris alley	Pratt and McHenry	4	111	
Stoddard alley	Robert and Presstman	4	172⅔	94 31
Cross	Jackson and the Basin	3	250	107 50

Mullikin	Dallas and Caroline	3	137½	68 23
Rear Charles	Fort avenue and Randall	3	237½	95 67
Rear Harlem avenue	Oregon and Fremont	3	137½	57 82
Rear Townsend	Carey and Calhoun	3	275	110 66
Madison	Castle and Washington	4	86⅓	42 21
Blood alley	Castle and Chester	3	62½	51 70
Rear Chester	Blood alley and Bohemian court	3	62½	
Rear Mount	Saratoga and Mulberry	3	275	100 55
Commerce	Pratt and Cable	6	444	430 65
Cable	Patterson and Commerce	4	123⅓	
Castle	Hampstead and Baltimore	4	5	71 55
		3	156	
Rear Gilmor	Lorman and Presstman	3	281	118 87
Argyle	Pitcher and Sewell	3	175	70 31
Conway	Hanover and Light	3	3	1,138 67
		4	6	
		6	27	
		8	740	
Mary	Clifton and Retreat	4	117	63 00
Bouldin alley	Mosher and McMechin	3	56	31 90
Morris alley	Presstman and Robert	4	123⅓	71 91
Rear Division	Bloome and Baker	3	125	64 27

Location, Size, Number of Feet and Cost of Distributing Main, Laid from January 1, 1883, *to December* 31, 1883.

Streets in which Pipes are Laid.	Between what Streets.	Size in Inches.	Length in Feet.	Cost.
Rear Biddle	Ann and McDonough	3	106	$87 99
Rear Ann	Biddle and Chase	3	87½	
Rear Madison	Dallas and Bond	3	62½	50 75
Oregon	Saratoga and Lorman alley	4	24⅔	63 39
Lorman alley	Oregon and Carlton	2	123	
Little Josephine	Pine and Myrtle avenue	2	109	48 25
Hampstead	Patterson Park ave. and Burke	4	148	152 20
Rear Patterson Park avenue	Baltimore and Hampstead	4	197⅓	
Chatsworth	Mosher and Fremont	4	74	548 38
		6	579⅔	
Chatsworth	Lanvale and Townsend	4	185	202 59
Townsend	Upton and Chatsworth	4	197⅓	
Rear Carey	Franklin and Mulberry	3	125	55 69

Rear Saratoga	Oregon and Schroeder	4	110	123	36
Rear Oregon	Saratoga and Wagon alley	3	175		
Barclay	Second and Third	4	164	115	85
Pulaski	Pratt and Frederick avenue	3	87½	98	79
Rear Pratt	Payson and Pulaski	3	125		
Park avenue	First and Second	4	357⅔	240	77
		6	37		
Rear North	Townsend and North avenue	4	333	179	86
Rear Lanvale	Greenmount ave. and Barclay	4	172⅔	301	05
Carter alley	Townsend and Lanvale	4	419⅓		
Rear St. Paul	Townsend and Lanvale	4	135⅔	78	50
Chestnut	Hillen and Front	6	419⅓		
Front	Chestnut and East	3	100	601	13
		6	234⅓		
Vincent alley	Mulberry and Franklin	3	37½	20	00
Division	Robert and Presstman	4	49⅓	30	15
Rear Harlem avenue	Carey and Stockton alley	3	50	29	13
Stansbury alley	Monument and Gay	3	15	7	42
Rear Washington	Jefferson and McElderry	3	75	43	73
Kuper	Stoddard and Woodyear alleys	4	222	119	56
Vincent alley	Pratt and McHenry	4	49⅓	30	73

Location, Size, Number of Feet and Cost of Distributing Main, Laid from January 1, 1883, to December 31, 1883.

Streets in which Pipes are Laid.	Between what Streets.	Size in Inches.	Length in Feet.	Cost.
Nanticoke	Cross and Stockholm	3	125	$50 31
Rear Calvert	Townsend and Lanvale	4	407	228 58
Tyson alley	Howard and Tyson streets	6	579 2/3	634 93
Howard	Tyson alley and Biddle			
Preston	Maryland ave. and Morton alley	3	175	74 44
Norris alley	Ramsay and McHenry	4	193	100 66
Rear Lanvale	Barclay and Greenmount ave.	4	185	90 29
Foster alley	Wilson and Laurens	6	240 1/3	163 57
Rear Etting	Bloome and Baker	3	128	54 16
Rear McCullough	Bloome and Presstman	3	175	80 45
Rear Mulberry	Vincent alley and Mount	3	200	79 36
Madeira alley	McElderry and Jefferson	3	75	99 63
		4	111	
McElderry	Duncan alley and Castle	3	262 1/2	112 22
Holliday	Bath and Centre	6	1,159 1/3	1,183 61
Centre	Bath and Davis			

Frederick	Lombard and Second	6	333	418	95
Rear Mulberry	Gilmor and Stricker	3	75	36	83
Rear Mosher	Carrollton avenue and Carey	3	175	70	78
Rear Tennant	Mount and Fulton	3	162½	64	41
Rear Calvert	Federal and Lanvale	4	246⅔	126	56
Rear Hanover	Jephson and Moale	3	350	140	49
Linden avenue	Robert and Presstman	4	160⅓	244	48
Robert	Linden avenue and Jordon alley	4	246⅔		
Rear Stricker	Cairo and Franklin	3	100	64	12
Robert	Druid Hill ave. and McCullough	4	74	80	84
Stoddard alley	Robert and Presstman	4	61⅔		
Rear Division	Robert and Laurens	3	100	37	26
Cairo	Calhoun and Stricker	4	125	35	11
Chase	Constitution and Buren	3	87½	37	90
Norris alley	Townsend and Lanvale	3	62½	34	07
Madison	Castle and Washington	4	35	67	55
Rear Washington	Madison and Monument	2	112		
From Richmond	Along Cathedral to Biddle, to Hoffman	8	1,714	2,252	63
Rear Patterson avenue	Vincent alley and Mount	3	4	28	46
		2	49		
Rear Mount	Saratoga and Lexington	3	137½	62	22
Heath	Hanover and Charles	4	135⅔	89	21

New Supplies for the year ending December 31, 1883.

691	Dwellings,	@	$5 00..	$3,455 00	
715	"	@	7 50..	5,362 50	
523	"	@	9 00..	4,707 00	
155	"	@	12 00..	1,860 00	
22	"	@	14 00..	308 00	
15	Warehouses,	@	6 00..	90 00	
6	"	@	8 00..	48 00	
31	"	@	10 00..	310 00	
2158					$16,140 50
1018	Baths,	@	2 00..	$2,036 00	
666	Water closets,	@	2 00..	1,332 00	
309	Hose,	@	3 00..	927 00	
64	Horses,	@	1 50..	96 00	
19	Carriages,	@	1 50..	28 50	
18	Urinals,	@	1 50..	27 00	
7	Cows,	@	1 00..	7 00	
4259					4,453 50
7	Bars,	@	3 00..	$21 00	
11	"	@	5 00..	55 00	
8	Churches,	@	10 00..	80 00	
5	Barbers,	@	3 00..	15 00	
1	Fountain,			10 00	
10	Motors,	@	25 00..	250 00	
2	"	@	50 00..	100 00	
16	Forges,	@	2 50..	40 00	
1	Errich pump,			6 00	
1	Butchery,			5 00	
1	Greenhouse,			20 00	
1	Shoe factory.			10 00	
4323	Amounts carried forward..			$612 00	$20,594 00

4323	Amounts brought forward.		$612 00	$20,594 00
1	Foundry,		10 00	
5	Extra families,	@ $2 00..	10 00	
1	Brick-yard,		125 00	
1	Packing-house,		50 00	
1	Candy factory,		10 00	
1	Dyer,		5 00	
2	Gas engines,	@ 10 00..	20 00	
1	Oyster packing,		5 00	
1	" "		15 00	
1	Bottling,		10 00	
1	Special,		9 00	
2	Specials,	@ 10 00..	20 00	
1	Special,		25 00	
1	"		50 00	
1	"		175 00	
1	1 H. P. Boiler,		5 00	
2	3 " "	@ 15 00..	30 00	
3	6 " "	@ 30 00..	90 00	
2	8 " "	@ 40 00..	80 00	
3	10 " "	@ 50 00..	150 00	
2	15 " "	@ 75 00..	150 00	
1	20 " "		100 00	
1	22 " "		110 00	
1	30 " "		150 00	
2	45 " "	@225 00..	450 00	
4362				$2,466 00
				$23,060 00

Engineer and Superintendent's Report,

COUNTY DIVISION.

REPORT.

OFFICE OF THE

ENGINEER AND SUPERINTENDENT—COUNTY DIVISION,

LAKE MONTEBELLO, January 1, 1884.

R. K. MARTIN, ESQ., *Chief Engineer*
Baltimore City Water Department:

SIR:

I herewith respectfully submit my report for the year ending December 31, 1883.

JONES' FALLS SUPPLY.

Lake Roland: This lake has been able to supply the demand made upon it during the year, and has been full of good water.

The interior of the gate-house has been repainted, and the slate roof repaired.

There has been 3,626 feet of wire fence put up between the old line of the Western Maryland Railroad (now a branch of the N. C. R. R.,) and the lake; also 3,668 feet of the same kind of fence was put up

around the city property binding on Towson Branch. This fencing has cost the department six cents per running foot.

I would respectfully suggest that the old fence now on the line, between the lake and the Northern Central Railroad, and between Hollins and Lake Stations, be replaced with a wire fence similar to the above.

The willow trees on the margin of the lake have grown to such a size that the high winds have broken some of them, and many of the branches of others.

Two car-loads of this material was sent to the high-service pump-house for fuel.

One hundred and seventy-five barrels of corn were raised on the land adjoining the lake, belonging to the department, and which have been distributed to our different stables.

There is about twenty tons of hay on hand, and there was returned to the Water Registrar two hundred and forty-seven $\frac{09}{100}$ dollars for hay and fodder sold on the ground during 1883.

From the middle of October, and until the last of November, the water in this lake was kept eighteen inches below the breast of the dam by opening the waste-gates. All the sediment showing after the water was thus lowered has been removed. This deposit was found at the mouth of the streams emptying into the lake.

The greatest flow of this supply was on the 27th of June, when the water was 12 inches deep over the dam, equal to about 8,500,000 gallons per hour.

THE HARPER WASTE WEIR.

The house here has been repainted and furnished with a galvanized-iron block and fall for raising the circular opening in the iron floor over the conduit.

The waste-gates here have been raised several times during the year, and the conduit thoroughly flushed.

Seventy-one panels of new post and rail-fence have been put up on the property owned by the department over the conduit line, near the village of Cross Keys.

HAMPDEN RESERVOIR.

The iron railing around this reservoir has been repainted; also the interior of the gate-house. The slate roof of the gate-house was also repaired. The walks, grass sod, and the wooden fence around this reservoir are in good condition.

There were fifty-seven dollars received from the sale of hay here and from off of the conduit line, which has been turned over to the Water Registrar.

The pipe-lines connecting this reservoir with Druid Lake have been no expense to the department during the year.

DRUID LAKE.

This lake has been full of good water during the year. The waste-gate at the bottom has been opened frequently, whenever there was a sufficiency of water to justify doing so, in order to prevent a return of the periodical bad taste; and as there has not been any complaint of bad water since last March (and then

only for a short time), it is hoped, therefore, that the above method will be successful in preventing any further complaints.

The drive around the lake has been kept in good repair, and is used more than any other road in Druid Hill Park for pleasure-driving.

The iron railing around the lake has been repainted; also the interior of the stop-house, stop-vault and tower.

There were 328 cart-loads of street sweepings hauled here for top-dressing the outside grass slopes, and which will be very beneficial to the sod and grass.

During the past year the grass has been cut repeatedly, and but little hay could be made; however, a sufficient quantity was secured for the use of the horse and mule kept here.

The water in this lake has been daily tested at different depths, so as to detect whenever it had an unpleasant taste.

HIGH SERVICE RESERVOIR.

This reservoir has been fully able during the year to supply good, clear water to all of the demands made on it.

A slight leak in one of the stop-wells outside of this reservoir was observed early in the past year. It was attentively looked after, and has now nearly disappeared.

The walks and grass slopes are in good condition, and have been kept so during the year.

A new boat was purchased and placed in this reservoir.

MT. ROYAL RESERVOIR.

This reservoir, although having been built for the Jones' Falls water supply, has been, during the year, continuously supplied with water from the Gunpowder supply, except what has been discharged through the fountain pipe from Druid Lake.

The house around this fountain pipe in the centre of the reservoir has been repainted, also the interior of the stop-vault, stops and the iron railing around the reservoir.

A new walk up the slope of the outside embankment, opposite the keeper's house, has been built.

The street-sweepings have been scattered on the outside slopes here, improving the sod and grass very much.

There was $10.50 received from the sale of hay here.

THE GUNPOWDER SUPPLY.

Loch Raven: This storage-lake has been full of water during the past year, with an average depth of flow of 4 inches over the dam. The greatest flow of water was on the 27th of June, when it reached a depth of 28 inches, or equal in volume to about 73,000,000 gallons of water per hour.

A large number of the most suitable stone in the waste-dump, near the dam, has been broken up, and used to rip-rap the shores of the lake.

This waste-dump will be leveled off and covered with earth, and then top-dressed with soil and set in grass.

The banks from the drive to the water's edge are being graded to a uniform slope of $1\frac{3}{4}$ to 1, and sown with grass seed.

The drive on the west side is being improved gradually. The keeper at the temporary supply has a small force at work on this drive at the upper end of the lake. There has been sixteen cords of wood sent from the temporary supply by way of the N. C. R. R. for use at the high-service pump-house.

The cleared land at the upper end of this lake was farmed out on shares, and the department received as its share 55 barrels of corn, 20 bushels of oats and 4 tons of hay. There was also about 5 tons of hay cut from the shores and sides of the drive.

A flight of granite steps have been built from the drive to the boat landing on the north side of the gate-house; also an iron guard-rail has been placed around the walk outside of the gate-house.

Between seven and eight thousand young trees were taken from the forest here and replanted in the open grounds; also 163 young evergreens (mostly Norway pines) have been planted out, and 5,000 young evergreens, assorted, have been placed in a nursery here for future use.

A hedge consisting of 250 American aborvitæ plants has been planted around the garden at the keeper's house.

THE CONDUIT.

This conduit, from Loch Raven to Lake Montebello, is in thorough working order. An inspection of its interior was made on the 21st of February and was found in the same good condition as when completed.

LAKE MONTEBELLO.

This lake has had nothing but clear water in it during the year. As soon as the water in Loch Raven becomes cloudy the supply to this lake is immediately cut off, and it remains so until the water is sufficiently clear to be again sent down.

When this lake is full, the water is thirty feet in depth. It was lower on the 24th of February and 10th of August than at any other time during the year, when it was 13 feet below the high water mark.

Whenever the water in Loch Raven is clear, Lake Montebello can be filled, whilst the city is drawing from it at the rate of five feet rise per day without stopping the flow of water over the dam at Loch Raven.

The gate-house is completed, the floor having been finished and the railing placed around the chambers therein during the past year.

The pyrus japonica hedges, containing fourteen thousand plants, set one foot apart, have been planted on each side of the drive around the lake; also one hundred and two evergreens were planted at different places here.

The drive has not yet been completed. A road leading into this drive from the Harford road, near Hall's Springs, has been made, and this, together with the one leading in from the Hillen road, gives two entrances to the drive around this lake.

There has been 100 bushels of oats, 56 barrels of corn and about 25 tons of hay raised here during the year, and from which the city stable has been supplied.

The drain tunnel is in good condition, also the conduit from here to Clifton gate-house.

LAKE CLIFTON.

The gate-house here is just as it was at the time of my last year's report—all in thorough working order, and the only expense attending it is the pay of the watchman.

The lake is under contract, and is expected to be finished in two years.

The 8 mules owned by the department, for keeping the banks of the lake thoroughly rolled during their construction, are all in good order, and are fed and cared for at Lake Montebello.

The forty-inch main from the gate chambers to the city are in good condition.

It affords me pleasure to say that the keepers and employees of this division have faithfully performed their respective duties during the year.

Accompanying this report will be found tables show-

ing the annual rainfall, and the capacity of each of the supplies; also an inventory of the property on hand at the different stations.

Respectfully submitted,

WM. L. KENLY,
Engineer and Superintendent County Division
Baltimore Water Department.

STATEMENTS,

Engineer and Superintendent's Report,

COUNTY DIVISION.

Table of Rainfall, Baltimore Water Works, 1883, *in Inches and Fractions of an Inch.*

1883.	Jones' Falls Supply.				Gunpowder Supply.	
	Lake Roland.	Hampden Reservoir.	Druid Lake.	Mt. Royal Reservoir.	Loch Raven.	Lake Montebello.
January	3.58	3.60	4.07	3.10	3.36	3.55
February...	3.65	4.08	4.71	5.70	5.23	5.01
March.....	3.33	3.74	3.62	2.60	3.54	3.40
April.....	3.10	3.24	5.09	3.25	3.15	3.27
May	4.70	1.96	1.92	1.14	1.13	1.38
June.....	9.61	7.50	7.00	6.40	10.30	7.68
July.....	3.50	3.30	3.09	2.98	3.88	3.69
August.....	1.87	2.16	2.74	3.00	2.62	2.28
September..	4.10	3.73	3.58	4.00	4.09	3.96
October	1.15	2.25	3.08	3.40	3.94	3.06
November..	1.30	1.13	1.31	1.45	1.42	1.40
December ..	3.54	3.50	3.50	3.45	4.07	3.10
Total.....	43.43	40.19	43.71	40.47	46.73	41.78

Gunpowder Water Supply for the Year Ending December 31st, 1883.

NUMBER OF GALLONS.

Month.	Clear Water over Loch Raven Dam.	Muddy Water over Loch Raven Dam.	Waste Water from bottom gates Loch Raven Gate House.	Clear Water sent to Lake Montebello from Loch Raven.	Total flow of the Gunpowder per month.	Average flow of stream per day.	Spring Water making in Tunnel.	Rain-fall, Lake Montebello.	Waste from bottom of Lake Montebello.	Waste from bottom Influent chamber from Tunnel Montebello Gate House.	Waste over Weirs in Lake Montebello Gate House.	Water sent to Clifton Gate House from Lake Montebello.	Waste Water from bottom Gate Lake Clifton Gate House.	Waste Water over Weir in Lake Clifton Gate House.	Total waste on line, including flow over Dam.	Average waste per day.	Sent to city during the month.	Average sent to city per day.	Sent to city from both supplies per day.
January	2,635,000,000	.....	1,268,567,325	1,458,959,040	5,362,526,365	172,948,721	93,000,000	5,864,918	396,088,177	281,894,150	23,953,224	855,023,489	187,768,044	3 301,950	4,796,572,870	154,728,157	664,818,413	21,445,755	31,737,732
February	393,000,000	10,020,000,000	977,000,000	142,600,000	11,532,600,000	411,880,000	84,000,000	7,500,000	10,000,000	60.000,000	....	420,560,000	....	....	11,460,000,000	409,285,714	420,560,000	15,020,000	24,292,945
March	3,075,000,000	2,430,000,000	1,052,400,000	1,079,000,000	7,636,400,000	246,335,484	93,000,000	4,312,500	218,500,000	....	30,000,000	733,312,500	119,000,000	1,500,000	6,926,400,000	223,432,258	612,812,500	19,768,145	26,930,133
April	3,370,000,000	1,040,000,000	1,127,600,000	914,000,000	6,451,600,000	215,053,333	90,000,000	5,400,000	266,400,000	97.700,000	40,300,000	605,300,000	159,000,000	1,400,000	6,102,400,000	203,413,333	444,900,000	14,830,000	20,830,892
May	3,024,000,000	293,000,000	1,165,000,000	1,270,000,000	5,752,000,000	185,483,871	93,000,000	2,300,000	516,000,000	192,000,000	35,000,000	622,300,000	160,000,000	1,000,000	5,386,000,000	173,548,387	461,300,000	14,870,968	22,653,549
June	453,000,000	5,445,000,000	1,128,000,000	591,000,000	7,617,000,000	253,900,000	90,000,000	12,300,000	116,000,000	....	11,000,000	566,300,000	40,000,000	300,000	7,193,300,000	239,776,667	526,000,000	17,533,333	26,866,666
July	442,000,000	3,210,000,000	1,165,000,000	656,000,000	5,473,000,000	176,548,390	93,000,000	5,000,000	218,000,000	....	12,000,000	645,000,000	56,000,000	....	5,103,000,000	164,612,903	589,000,000	19,000,000	27,064,516
August	200,000,000	1,070,000,000	625,000,000	938,000 000	2,833,000,000	91,387,097	93,000,000	3,600,000	140,000,000	....	9,000,000	783,600,000	80,000,000	600,000	2,124,600,000	68,535,484	703,000,000	22,677,419	33,012,903
September	678,000,000	1,452,000,000	423,000,000	741,000,000	3,294,000,000	104,966,666	90,000,000	6,000,000	93,000,000	....	17,000,000	727,000,000	80,000,000	1,000,000	2,744,000,000	91,466,667	646,000,000	21,200,000	32,866,666
October	1,690,000,000	2,336,000,000	409 000,000	624,000,000	5,059,000,000	163,193,548	93,000,000	5,000,000	50,000,000	11,000,000	13,000,000	617,000,000	58,000,000	1,000,000	4,570,000,000	147,419,355	558,000,000	18,000,000	29,387,097
November	2,240,000,000	251,000,000	425,000,000	1,127,000,000	4,043,000,000	134,666,666	90,000,000	2,000,000	355,000,000	146,000,000	70,000,000	648,000,000	60,000,000	4,000,000	5,551,000,000	118,366,666	584,000,000	19,466,666	31,041,999
December	3,224,000,000	....	437,000,000	820,000,000	4,481,000,000	144,548,387	93,000,000	5,000,000	140,000,000	132,000,000	48,000,000	598,000,000	62,000,000	4,000,000	4,047,000,000	130,548,387	533,000,000	17,200,000	28,490,323
Totals	21,424,000,000	27,547,000,000	10,202,567,325	10,361,559,040	69,535,126,365	....	1,095,000,000	64,277,418	2,518,988,177	920,594,150	309,253,224	7,821,395,989	1,061,768 044	18,101,950	64,004,272,870	....	6,743,390,913	....	....

Jones' Falls Supply for the Year Ending December 31st, 1883.

NUMBER OF GALLONS.

Month.	Clear Water over Lake Roland Dam.	Muddy Water over Lake Roland Dam.	Water from bottom gates Lake Roland Gate House.	Clear Water sent through Conduit Gates Lake Roland.	Total flow Jones' Falls per month.	Average flow of stream per day.	Rain-fall, Hampden Reservoir.	Rain-fall, Druid Lake.	Waste from gates, "Harper Weir."	Decrease of storage in Hampden Reservoir and Druid Lake.	Waste over Weirs on Conduit.	Water sent to Druid Lake.	Waste from bottom Druid Lake through No. 11 stop.	Increase of storage in Hampden Reservoir and Druid Lake.	Total waste on line, including flow over Dam.	Average waste per day.	Sent to city during the month.	Average sent to city per day.
January	60,000,000		206,139,342	426,132,936	692,272,278	22,331,364	700,000	5,171,435		48,176,000	36,771,840	389,361,096	76,181,222		379,092,404	12,228,787	319,051,309	10,291,977
February	221,000,000	261,000,000	852,000,000	317,360,000	1,651,360,000	58,977,143	882,465	6,900,000				318,242,465	17,000,000	41,600,000	1,351,000,000	48,250,000	259,642,465	9,272,945
March	143,000,000	45,000,000	690,000,000	242,000,000	1,120,000,000	36,129,032	797,623	5,700,000	10,000,000		4,200,000	228,597,623		6,576,000	802,200,000	28,780,645	222,021,623	7,161,988
April	253,000,000		340,000,000	247,605,000	890,000,000	26,686,667	702,675	6,000,000	9,900,000		8,400,000	190,002,675	16,000,000		618,900,000	20,630,000	180,002,675	6,000,892
May	30,000,000		234,500,000	333,000,000	597,000,000	19,258,065	260,000	3,000,000	10,000,000	76,000,000	10,000,000	316,260,000	75,000,000		359,500,000	11,600,000	241,260,000	7,782,581
June	114,000,000	266,000,000	525,500,000	236,000,000	1,141,500,000	38,050,000	1,200,000	10,800,000	15,000,000	50,000,000	3,000,000	219,200,000			923,500,000	30,783,333	280,000,000	9,333,333
July		6,000,000	216,000,000	350,000,000	572,000,000	18,451,613	900,000	4,700,000	5,000,000		600,000	350,000,000		100,000,000	227,600,000	7,322,580	250,000,000	8,064,516
August			22,000,000	400,000,000	422,000,000	13,612,903	400,000	3,000,000			57,000,000	346,000,000		26,000,000	79,000,000	2,548,387	320,400,000	10,335,484
September	62,000,000		37,000,000	400,000,000	499,000,000	16,633,333	800,000	5,200,000			56,000,000	350,000,000			155,000,000	5,166,666	350,000,000	11,666,666
October	10,000,000		219,000,000	410,000,000	539,000,000	17,387,097	500,000	5,000,000			62,000,000	353,000,000			291,000,000	9,387,097	353,000,000	11,387,097
November			188,000,000	350,000,000	538,000,000	17,933,333	260,000	2,000,000			5,000,000	347,000,000			193,000,000	6,433,333	347,260,000	11,575,333
December	70,000,000		32,000,000	443,000,000	545,000,000	17,583,645	500,000	4,500,000	10,000,000		8,000,000	430,000,000	80,000,000		200,000,000	6,451,613	350,000,000	11,290,323
Totals	963,000,000	578,000,000	3,562,139,342	4,115,092,936	9,117,132,278		7,902,763	61,971,435	59,900,000	174,176,000	250,971,840	3,837,663,859	264,181,222	174,176,000	5,669,792,404		3,472,638,072	

ANNUAL REPORT

OF THE

Inspector of Gas and Illuminating Oils,

TO THE

Mayor and City Council of Baltimore,

FOR THE

FISCAL YEAR ENDING DECEMBER 31, 1883.

REPORT.

OFFICE OF INSPECTOR OF GAS AND ILLUMINATING OILS,

BALTIMORE, January 9th, 1884.

To the Honorable the Mayor
and City Council of Baltimore:

GENTLEMEN:

The following report of the work of this office during the year ending December 31, 1883, is respectfully submitted: It is very satisfactory to note that the number of accidents occasioned by kerosene oil and gasoline have been less numerous than during any other one year since the ordinance went into operation. It is hardly necessary to add that the so-called lamp explosions, when investigated, often prove to be accidents due to other causes. Early in January, at 62 South Collington avenue, a gasoline lamp burst as a party was attempting to fill it while burning. Later in the month a reported lamp explosion at 177 Franklin street was found to have been caused by overheated lard on a stove taking fire. Another, in March, at 315 West Pratt street, was caused by a lamp broken by the

upsetting of a table. And still another, in May, was due to a coal oil stove having been upset on the corner of Caroline and Baltimore streets. In June, the first lamp explosion of the year happened at 237 South Eutaw street, as follows: A lamp had been left standing several days, partly filled, and burst soon after it was lighted. In July, a lamp accident was reported as having occurred at 233 East Lombard street, but no intelligible account could be obtained as to the character of the accident. In August, a broken lamp at the corner of Smith street and Wilmer alley gave rise to another false report. Early in September, a partly filled lamp exploded at 15 Robert street at the moment it was exposed to a sudden strong blast of air, and within a few days after a similar accident occurred at 112 Lexington street, in this last instance without any obvious cause. In October, a lamp burst in Armistead lane, with no one present in the room at the time. It was said that the lamp had been filled in the usual way in the morning, and was not standing in a draught at the time of the accident. In November, a fire at 54½ Raborg street, said to have been caused by a coal oil lamp, was manifestly due to some other agency. When the room on fire was forced open the coal oil lamp was found quietly burning on a table. In the same month, an out-door gasoline lamp burst in the neighborhood of the Broadway Market. Late in December, at 182 Hughes street, a nearly empty lamp, burning, exposed to a strong draught, suddenly burst, and still later in the month a gasoline street lamp exploded. These represent all the accidents that were brought to the notice of the Inspector during the year, and a summary of them will be found in the table

appended marked A. It will be seen that in many cases kerosene oil has no responsibility: some were due to doubtful agencies, and a few were veritable explosions. In all those cases samples of the oil in use were obtained and tested, and all showed a flashing point and density much above the standard. It is believed that no injury to person, and very little injury to property, has been suffered during the year from such accidents.

The observations of the year just closed, to a certain extent, confirm the conclusions drawn from the observations of the preceding. They would appear to indicate that the moment of danger with a kerosene oil lamp is when a partly filled lamp, recently lighted, is exposed to a current of air. There is no evidence that a properly filled lamp has ever exploded; theoretically, such an event is impossible. But if a partly filled lamp has the space above the oil filled with an explosive mixture of oil vapor and air, an explosion is inevitable whenever that mixture is kindled; and this is very likely to happen if a current of air should suddenly strike the burning lamp. In this way one can understand how explosions may occur where only legally safe oil is used. As all coal oil is volatile, the safest as well as the most dangerous, it follows that the production of an explosive mixture of oil vapor and air from any sample involves only the question of time. The more volatile the oil the lower will be its flashing point, the more rapidly will it furnish such explosive mixture, and consequently it is unsafe. The less volatile the oil the higher will be its flashing point; vaporizing more slowly, the dangerous mix-

ture is less readily formed, and such oil is therefore less dangerous, and if properly burned may be called safe. But still, under certain conditions, it may be the cause of accidents. A lamp partly filled with the best oil, if left standing long enough to allow this dangerous mixture of oil vapor and air to be formed, must explode whenever that mixture is kindled. The mixture in question consists of oil vapor and air in certain proportions. With a great excess of air the mixture is harmless; it will neither explode or burn. With a great excess of oil vapor it is equally harmless; it will not explode, but it will burn quietly if kindled in the air. Whether a lamp half full of oil, and left standing all day, contains any dangerous mixture, must be generally a matter of uncertainty. But one may be perfectly certain that the lamp, if properly filled, cannot contain any explosive material. Oil that flashes at the temperature of 120° Far. may be considered very safe, provided it is used properly. I should add that a lamp properly filled with good oil, and allowed to burn until the oil is half consumed, must be in a very different condition from one left standing for a long time only half full. From the operation of the physical law determining the admixture of gases and vapors when in contact, the one left standing must contain a mixture of oil vapor and air. It may or may not be an explosive mixture. If it be explosive, and the lamp is lighted, the action of a current of air may determine an accident which might not have happened in a still atmosphere. The lamp that has been burning until only half full of oil is more likely to have the space above the oil filled with the vapor of the oil, with too little air to be dangerous. These

views, then, point to two obvious precautions that should be strictly observed: To have all kerosene oil lamps properly filled before they are used, and to avoid exposing them, while burning, to a current of air.

Until the latter part of the last month of the year all the samples of oil daily tested were found to be up to or above the legal standard. Then eight retail dealers were found dealing in oil of dangerous character, showing a flashing point from 100° to 105° Far. The first three who were detected were summoned to answer for violation of the ordinance. Two of them were fined, in accordance with the law, by the police magistrate. The third took his case to the Criminal Court, and settled it there by paying the fine. The remaining cases, with the concurrence of his Honor the Mayor, were not summoned. It was thought enough had been done to insure the public safety and to vindicate the law, all the parcels of dangerous oil having been promptly withdrawn from sale and a safe article substituted. The first case of a dealer refusing to supply a sample was presented during the summer. After repeated refusals the party was brought before the police magistrate and fined, in accordance with the law. It is probable this will be the last case of the kind. The number of samples of oil tested during the year will be found arranged in the table marked B, and the results contrasted with those of the preceding year.

The improvement in the character of the gas supply noticed last season has proved permanent. Its chemical purity has been uniformly satisfactory to qualita-

tive tests, and its illuminating power has been steadily maintained much above the 16 candles required by the ordinance. Precisely how far above could not be determined with absolute exactness by the use of the very imperfect photometer arrangements belonging to the city. Hence the observations reported weekly during the year, and embodied in the table marked C, cannot claim to be more than approximate results, depending for accuracy on the judgment and experience of the observer. It is obviously important that observations of the illuminating power of the gas supply should be as exact as possible. But such observations are now simply impossible for want of proper apparatus. And they cannot be made until new instruments have been substituted for those which have been worn out by continuous use since the ordinance was first enacted, more than twenty years ago. In this condition of things it becomes the duty of the Inspector to beg the attention of your honorable bodies to this subject. He will be happy to confer at any time with any committee who may have in charge the nature and extent of the difficulty above referred to, and its proper remedy.

Respectfully, &c.,

WILLIAM E. A. AIKEN,
Inspector of Gas and Illuminating Oils.

TABLES.

TABLE A.

Showing the number of accidents occasioned by Kerosene Oil and Gasoline, with number of persons burned, and who died during the years 1882 and 1883:

	1882.	1883.
Total accidents	23	13
Lamps exploded	3	5
Lamps broken	1	3
Gasoline lamps burst	5	3
Coal oil on stove	1	0
Benzine on stove	2	0
Lamp flame	3	0
Cause doubtful	8	2
Number of persons burned	3	0
Number who died	1	0

TABLE B.

Showing the number of samples of Kerosene Oil tested and the number reported as dangerous during each quarter of the years 1882 and 1883:

	1882.		1883.	
	Samples tested.	Samples condemned.	Samples tested.	Samples condemned.
January ... February .. March	1360	0	1420	0
April ..... May. ..... June	1460	0	1440	0
July ..... August ... September.	1640	0	1590	0
October... November. December..	1460	0	1583	8
Total	5920		6033	

TABLE C.

Showing the estimated average illuminating power of the gas supplied to the city of Baltimore by the Consolidated Company and by the Equitable Gas Company during the year 1883:

	Consolidated.	Equitable.
January	19.25	20
February	19	20
March	18.60	19.60
April	19.25	20
May	19	20.25
June	19.40	20.80
July	20	21
August	20	21
September	20	20.25
October	20	20
November	20	20
December	19.40	19.40
Average for the year	19.49	20.19

The photometer is an 100-inch scale, with Bunsen disc and Sugg London Argand burner, letter F—the gas burning 5 cubic feet per hour, and standard candles calculated to the rate of 120 grains of sperm per hour.

ANNUAL REPORT

OF THE

DEPARTMENT

OF

STREET CLEANING

OF THE

CITY OF BALTIMORE,

TO THE

Mayor and City Council of Baltimore,

FOR THE

FISCAL YEAR ENDING DECEMBER 31, 1883.

OFFICERS AND EMPLOYEES

—OF THE—

DEPARTMENT OF STREET CLEANING

FOR THE YEAR 1883.

B. E. SMITH,
Commissioner of Street Cleaning.

THOMAS W. CAMPBELL,
Clerk.

Superintendents of Streets:

B. V. KELLY, *1st District.*
JOS. P. SCOTT, *2d District.*
MICHEL FADGEN, *3d District.*
JAS. F. BUSEY, *4th District.*
JOHN T. LEE, *5th District.*
HENRY LANCASTER, *6th Dist.*

Superintendents of Dumps:

JOHN HOLDEFER, *Canton.*
E. PUMPHREY, *Spring Garden.*
F. P. QUINN, *Back Basin.*
J. T. CROPPER, *Eager Street.*
ALFRED FREEDY, *South Baltimore.*

REPORT.

DEPARTMENT OF STREET CLEANING—CITY HALL,

BALTIMORE, January 1, 1884.

To the Honorable the Mayor
and City Council of Baltimore:

GENTLEMEN:

In conformity with the provisions of Ordinance No. 6, approvad February 21, 1882, I have the honor to submit herewith the report of the Department of Street Cleaning.

The annexed tables show the number of men and carts employed, the work performed by the Department during the year, the money expended, and the amount received for refuse, &c.

The appropriation for the Department for the year 1883 was much less than estimated, and the ordinance approved May 1, 1883, increasing the pay of the employees (without providing for an additional appropriation), rendered necessary a reduction of their number, as well as a decrease of time of those retained in the service. The work of the Department, reaching as

it does every household and business place, for the removal of offal, ashes, &c., and the cleaning of all streets and alleys of the city, it is necessary that it be properly performed, and should be regular and systematic. This is not possible if the appropriation is insufficient, or the amounts to be paid are varying. To secure efficiency, the best men should be employed and retained during a proper performance of duty; but your Commissioner, however, is powerless to get at all times, proper men, as he has not their selection, and respectfully refers the Council to the ordinance creating the office (Ordinance No. 6, of 1882).

The increase in the number of dwelling-houses during the past year has been large in every section of the city, and requires the employment of additional force to meet the wants of the occupants.

The Department during the year has had an unusual amount of labor imposed on it by the improvement of streets and the paving and repaving of others. As provided by law, the sand remains on newly-paved or repaved streets a certain time, causing much annoyance from dust, and I would suggest that a sprinkler be provided, which would avoid this trouble and annoyance to the citizens.

Much work has been accomplished during the year. In addition to the thorough cleaning of the streets and alleys, the large accumulation of offal at the several market-houses, after each market day, has been promptly removed, and in some districts required one-third of the time of the force. The gutter plates at

street crossings have received prompt attention, and been kept in good condition. Much relief was experienced during the past summer by the flushing of the gutters, by order of the Water Board, which greatly aided this Department.

Under the provisions of ordinance approved May 25, 1882, after the proper advertisement for bids for the removal of garbage and sale of street dirt had been made, a contract was entered into with Messrs. H. F. Turner & Co. for said removal for the sum of eight thousand five hundred dollars ($8,500), and the purchase of the street dirt for twenty-five hundred dollars ($2,500). The contract being for one year, from July 1, 1883, an appropriation of $2,125 was made by ordinance approved October 12th, for the payment of the quarter due October 1, 1883. No provision has been made for the payment of the quarter maturing January 1, 1884. Your Commissioner realized from the sale of refuse, &c., and returned to the Comptroller thirty-five hundred and fourteen dollars and sixty cents ($3,514.60).

It is gratifying to report that the condition of the city is such as to sustain its reputation for cleanliness.

In conclusion I desire to return thanks to the superintendents for prompt and generous co-operation, and to the faithful men employed in the Department, by whose aid and service its affairs have been properly administered.

The following is the estimate of expenses for the Department of Street Cleaning for the year 1884:

124 Garbage carts and men	$116,064 00
55 Street carts and men	51,480 00
120 Sweepers and scrapers	62,400 00
Contract for removal of garbage, &c	6,375 00
Salaries	9,200 00
Dumps	4,500 00
Tools and incidentals	1,700 00
	$251,719 00

Respectfully submitted,

B. E. SMITH,
Commissioner of Street Cleaning.

TABLES.

TABLE A.

Weekly Report showing amount of work done in the Street Cleaning Department, the number of men and carts employed in the several Districts, and amount of money expended for the same, from Jan. 1 to Dec. 31, 1883.

FIRST DISTRICT. — B. V. KELLY, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, &c., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, &c.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	No. of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending Jan. 2.....	548	915	$471 00	$216 00	16	10	24	1463	$687 00
" " 8.....	566	1220	288 00	489 00	16	13	28	1786	777 00
" " 15.....	579	2010	288 00	450 00	16	12	28	2589	738 00
" " 22.....	598	2173	288 00	447 75	16	12	26	2771	735 75
" " 29.....	573	1854	288 00	450 00	16	12	28	2427	738 00
	2864	8172	$1623 00	$2052 75	80	59	134	11036	$3675 75
Week ending Feb. 5....	558	1392	$288 00	$441 00	16	12	28	1950	$729 00
" " 12....	591	990	288 00	390 75	16	12	25	1581	678 75
" " 19....	595	1005	288 00	379 50	16	12	23	1600	667 50
" " 26....	571	1050	288 00	392 25	16	12	23	1621	680 25
	2315	4437	$1152 00	$1603 50	64	48	99	6752	$2755 50

TABLE A—Continued.

FIRST DISTRICT. B. V. KELLY, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, &c., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, &c.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	No. of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending March 5..	589	865	$288 00	$367 50	16	10	23	1454	$655 50
" " 12..	532	770	287 25	323 57	16	10	23	1302	610 82
" " 19..	551	735	288 00	326 25	16	10	23	1286	614 25
" " 26..	492	800	240 00	330 75	16	10	23	1292	570 75
	2164	3170	$1103 25	$1348 07	64	40	92	5334	$2451 32
Week ending April 2...	571	690	$288 00	$294 75	16	10	23	1261	$582 75
" " 9...	555	905	288 00	387 00	16	10	23	1460	675 00
" " 16...	514	905	240 00	378 00	16	10	23	1419	618 00
" " 23...	495	800	240 00	332 25	16	9	20	1295	572 25
" " 30...	538	645	240 00	280 50	16	9	20	1183	520 50
	2673	3945	$1296 00	$1672 50	80	48	109	6618	$2968 50

Week ending May 7...	544	810	$240 00	$342 00	16	9	20	1354	$582 00
" " 14...	539	810	240 00	340 50	16	9	20	1349	580 50
" " 21...	546	810	240 00	341 25	16	9	20	1356	581 25
" " 28...	549	835	240 00	326 25	16	9	20	1384	566 25
	2178	3265	$960 00	$1350 00	64	36	80	5443	$2310 00
Week ending June 4...	542	940	$270 00	$314 00	15	8	17	1482	$584 00
" " 11...	555	855	270 00	314 00	15	8	17	1410	584 00
" " 18...	558	730	270 00	314 00	15	8	17	1288	584 00
" " 25...	561	735	270 00	314 00	15	8	17	1296	584 00
	2216	3260	$1080 00	$1256 00	60	32	68	5476	$2336 00
Week ending July 2...	583	690	$270 00	$291 68	15	8	17	1273	$561 68
" " 9...	538	725	270 00	314 00	15	8	17	1263	584 00
" " 16...	544	725	270 00	312 34	15	8	17	1269	582 34
" " 23...	558	725	270 00	310 68	15	8	17	1283	580 68
" " 30...	558	725	270 00	314 00	15	8	17	1283	584 00
	2781	3590	$1350 00	$1542 70	75	40	85	6371	$2892 70

TABLE A—Continued.

FIRST DISTRICT. — B. V. KELLY, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, &c., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, &c.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	No. of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending August 6.	561	705	$270 00	$299 33	15	8	17	1266	$569 33
" " 13.	551	720	270 00	304 00	15	8	16	1271	574 00
" " 20.	549	595	270 00	255 16	15	8	17	1144	525 16
" " 27.	541	720	270 00	314 00	15	8	17	1261	584 00
	2202	2740	$1080 00	$1172 49	60	32	67	4942	$2252 49
Week ending Sept. 3...	560	700	$270 00	$305 17	15	8	17	1260	$575 17
" " 10...	543	720	270 00	314 00	15	8	17	1263	584 00
" " 17...	548	710	270 00	305 18	15	8	17	1258	575 18
" " 24...	557	715	270 00	309 16	15	8	17	1272	579 16
	2208	2845	$1080 00	$1233 51	60	32	68	5053	$2313 51

Week ending October 1.	555	695	$270 00	$301 33	15	8	17	1250	$571 33
" " 8.	550	725	270 00	314 00	15	8	17	1275	584 00
" " 15.	550	780	270 00	314 00	15	8	17	1330	584 00
" " 22.	551	725	270 00	314 00	15	8	17	1276	584 00
" " 29.	537	630	270 00	264 66	15	8	17	1167	534 66
	2743	3555	$1350 00	$1507 99	75	40	85	6298	$2857 99
Week ending Nov. 5....	551	665	$270 00	$290 00	15	8	17	1216	$560 00
" " 12....	574	635	225 00	258 00	15	8	17	1209	483 00
" " 19....	543	725	270 00	309 00	15	8	17	1268	579 00
" " 26....	552	735	270 00	314 00	15	8	17	1287	584 00
	2220	2760	$1035 00	$1171 00	60	32	68	4980	$2206 00
Week ending Dec. 3....	427	515	$240 00	$214 16	16	8	17	942	$454 16
" " 10....	517	625	240 00	258 00	16	8	16	1142	498 00
" " 17....	532	625	240 00	266 30	16	8	17	1157	506 30
" " 24....	537	590	240 00	240 42	16	8	17	1127	480 42
" " 31....	588	790	288 00	314 00	16	8	17	1378	602 00
	2601	3145	$1248 00	$1292 88	80	40	84	5746	$2540 88

TABLE A—Continued.

SECOND DISTRICT. — JOSEPH P. SCOTT, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, &c., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, &c.	No. of Garbage Carts Employed.	Number of Street Carts Employed.	No. of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending January 2.	671	660	$378 00	$306 00	21	11	12	1331	$684 00
" " 9.	706	540	378 00	306 00	21	9	16	1246	684 00
" " 16.	704	816	375 00	297 00	21	9	16	1520	672 00
" " 23.	724	1030	378 00	298 50	21	9	16	1754	676 50
" " 30.	749	768	378 00	288 00	21	9	16	1517	666 00
	3554	3814	$1887 00	$1495 50	105	47	76	7368	$3382 50
Week ending Feb. 6....	731	672	$378 00	$276 00	21	9	16	1403	$654 00
" " 13....	726	480	378 00	231 75	21	9	16	1206	609 75
" " 20....	737	310	378 00	174 75	21	9	14	1047	552 75
" " 27....	729	648	378 00	306 00	21	9	16	1377	684 00
	2923	2110	$1512 00	$988 50	84	36	62	5033	$2500 50

Week ending March 6..	539	450	$378 00	$260 75	21	9	17	989	$638 75
" " 13..	614	158	372 00	126 00	21	8	16	772	498 00
" " 20..	635	535	375 00	313 50	21	9	17	1170	688 50
" " 27..	620	440	309 00	276 00	21	9	17	1060	585 00
	2408	1583	$1434 00	$976 25	84	35	67	3991	$2410 25
Week ending April 3..	642	453	$378 00	$264 00	21	9	17	1095	$642 00
" " 10..	604	636	378 00	312 00	21	9	17	1240	690 00
" " 17..	548	500	313 50	294 00	21	9	17	1048	607 50
" " 24..	510	372	315 00	276 75	21	8	16	882	591 75
	2304	1961	$1384 50	$1146 75	84	35	67	4265	$2531 25
Week ending May 1...	486	348	$315 00	$265 50	21	8	16	834	$580 50
" " 8...	469	576	309 00	291 00	21	8	16	1045	600 00
" " 15...	418	551	307 50	279 00	21	8	16	969	586 50
" " 22...	419	480	315 00	288 00	21	8	16	899	603 00
" " 29...	451	540	315 00	266 25	21	8	16	991	581 25
	2243	2495	$1561 50	$1389 75	105	40	80	4738	$2951 25

TABLE A—Continued.

SECOND DISTRICT. JOSEPH P. SCOTT, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, &c., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, &c.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	No. of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending June 5...	406	576	$342 00	$284 00	19	8	14	982	$626 00
" " 12...	381	576	342 00	284 00	19	8	14	957	626 00
" " 19...	404	696	342 00	284 00	19	8	14	1100	626 00
" " 26...	406	698	342 00	284 00	19	8	14	1104	626 00
	1597	2546	$1368 00	$1136 00	76	32	56	4143	$2504 00
Week ending July 3...	398	674	$342 00	$284 00	19	8	14	1072	$626 00
" " 10...	335	455	342 00	271 44	19	8	14	790	613 44
" " 17...	366	672	342 00	284 00	19	8	14	1038	626 00
" " 24...	353	624	339 00	284 00	19	8	14	977	623 00
" " 31...	373	480	342 00	284 00	19	8	14	853	626 00
	1825	2905	$1707 00	$1407 44	95	40	70	4730	$3114 44

Week ending August 7..	381	567	$336 00	$253 98	19	8	14	948	$589 98
" " 14..	393	720	339 00	284 00	19	8	14	1113	623 00
" " 21..	412	452	327 00	239 94	19	8	14	864	566 94
" " 28..	433	540	342 00	264 50	19	7	14	973	606 50
	1619	2279	$1344 00	$1042 42	76	31	56	3898	$2386 42
Week ending Sept. 4..	424	598	$339 00	$267 98	19	8	14	1022	$606 98
" " 11..	423	552	333 00	278 00	19	8	14	975	611 00
" " 18..	409	498	342 00	236 07	19	8	13	907	578 07
" " 25..	421	585	330 00	265 80	19	8	14	1006	595 80
	1677	2233	$1344 00	$1047 85	76	32	55	3910	$2391 85
Week ending Oct. 2...	396	540	$342 00	$262 48	19	8	14	936	$604 48
" " 9...	400	516	339 00	258 13	19	8	14	916	597 13
" " 16...	394	674	342 00	271 30	19	8	14	1068	613 30
" " 23...	407	697	339 00	272 82	19	8	14	1104	611 82
" " 30...	410	412	306 00	217 43	20	8	14	822	523 43
	2007	2839	$1668 00	$1282 16	96	40	70	4846	$2950 16

TABLE A—Continued.

SECOND DISTRICT. — JOSEPH P. SCOTT, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, &c., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, &c.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	No. of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending Nov. 6...	443	473	$342 00	$252 31	19	8	14	916	$594 31
" " 13...	449	492	300 00	241 27	20	8	14	941	541 27
" " 20...	503	720	342 00	284 00	19	8	14	1223	626 00
" " 27...	550	516	342 00	257 31	19	8	14	1066	599 31
	1945	2201	$1326 00	$1034 89	77	32	56	4146	$2360 89
Week ending Dec. 4...	511	432	$300 00	$216 27	20	8	14	943	$516 27
" " 11...	540	462	292 50	244 29	20	8	14	1002	536 79
" " 18...	529	492	294 00	241 29	20	8	14	1021	535 29
" " 25...	575	303	297 00	230 79	20	8	14	878	527 79
" " 31...	583	920	357 00	274 66	20	8	14	1503	631 66
	2738	2609	$1540 50	$1207 30	100	40	70	5347	$2747 80

THIRD DISTRICT.

MICHAEL FADGEN, Sup't.

Week ending January 3.	598	948	$288 00	$424 50	16	12	23	1546	$712 50
" " 10.	604	1056	288 00	444 75	16	13	24	1660	732 75
" " 17.	626	926	288 00	451 50	16	13	24	1552	739 50
" " 24.	642	1106	288 00	465 00	16	14	25	1748	753 00
" " 31.	678	1119	288 00	471 75	16	14	25	1797	759 75
	3148	5155	$1440 00	$2257 50	80	66	121	8303	$3697 50
Week ending Feb. 7....	688	864	$288 00	$462 75	16	14	25	1552	$750 75
" " 14....	688	1088	288 00	453 75	16	14	25	1776	741 75
" " 21....	688	942	288 00	372 75	16	14	25	1630	660 75
" " 28....	688	891	288 00	410 25	16	12	23	1579	698 25
	2752	3785	$1152 00	$1699 50	64	54	98	6537	$2851 50
Week ending March 7..	588	730	$288 00	$376 50	16	11	20	1318	$664 50
" " 14..	688	702	288 00	346 50	16	11	20	1390	634 50
" " 21..	612	557	288 00	377 25	16	11	20	1169	665 25
" " 28..	526	418	240 00	291 75	16	11	20	944	531 75
	2414	2407	$1104 00	$1392 00	64	44	80	4821	$2496 00

TABLE A—Continued.

THIRD DISTRICT. — MICHAEL FADGEN, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, &c., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, &c.	No. of Garbage Carts Employed.	Number of Street Carts Employed.	No. of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending April 4...	608	517	$288 00	$298 50	16	11	19	1125	$586 50
" " 11...	556	484	270 00	369 00	15	11	19	1040	639 00
" " 18...	497	605	225 00	378 75	15	11	20	1102	603 75
" " 25...	497	479	225 00	277 50	15	10	18	976	502 50
	2158	2085	$1003 00	$1323 75	61	43	76	4243	$2331 75
Week ending May 2....	497	600	$225 00	$333 75	15	10	18	1097	$558 75
" " 9....	495	723	225 00	341 25	15	10	18	1218	566 25
" " 16....	495	672	225 00	342 00	15	10	18	1167	567 00
" " 23....	495	677	225 00	342 00	15	10	18	1172	567 00
" " 30....	495	677	225 00	265 50	15	10	18	1172	490 50
	2477	3349	$1125 00	$1624 50	75	50	90	5826	$2749 50

Week ending June 6...	520	611	$234 00	$322 00	13	9	16	1131	$556 00
" " 13...	468	646	234 00	317 00	13	9	16	1114	551 00
" " 20...	498	642	234 00	321 17	13	9	16	1140	555 17
" " 27...	518	639	234 00	322 00	13	9	16	1157	556 00
	2004	2538	$936 00	$1282 17	52	36	64	4542	$2218 17
Week ending July 3...	520	597	$234 00	$295 05	13	9	16	1117	$529 05
" " 11...	520	594	234 00	320 33	13	9	16	1114	554 33
" " 18...	520	611	234 00	322 00	13	9	16	1131	556 00
" " 25...	520	653	234 00	322 00	13	9	16	1173	556 00
	2080	2455	$936 00	$1259 38	52	36	64	4535	$2195 38
Week ending Aug. 1...	521	609	$234 00	$321 17	13	9	16	1130	$555 17
" " 8...	521	648	234 00	322 00	13	9	16	1169	556 00
" " 15...	521	618	234 00	322 00	13	9	16	1139	556 00
" " 22...	533	548	234 00	276 97	13	9	16	1081	510 97
" " 29...	533	624	234 00	322 00	13	9	16	1157	556 00
	2629	3047	$1170 00	$1564 14	65	45	80	5676	$2734 14

TABLE A—Continued.

THIRD DISTRICT. — MICHAEL FADGEN, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, &c., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, &c.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	No. of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending Sept. 5..	533	617	$234 00	$322 00	13	9	16	1150	$556 00
" " 12..	533	620	234 00	322 00	13	9	16	1153	556 00
" " 19..	533	633	234 00	322 00	13	9	17	1166	556 00
" " 26..	533	641	234 00	318 66	13	9	16	1174	552 66
	2132	2511	$936 00	$1284 66	52	36	65	4643	$2220 66
Week ending Oct. 3...	533	641	$234 00	$322 00	13	9	16	1174	$556 00
" " 10...	546	626	234 00	321 17	13	9	16	1172	555 17
" " 17...	546	633	234 00	320 34	13	9	16	1179	554 34
" " 24...	516	642	234 00	322 00	13	9	16	1158	556 00
" " 31...	546	544	234 00	284 17	13	9	16	1090	518 17
	2687	3086	$1170 00	$1569 68	65	45	80	5773	$2739 68

Week ending Nov. 7...	541	646	$234 00	$322 00	13	9	16	1187	$556 00
" " 14...	429	535	195 00	256 48	13	9	16	964	451 48
" " 21...	507	660	234 00	322 00	13	9	16	1167	556 00
" " 28...	546	622	234 00	317 00	13	9	16	1168	551 00
	2023	2463	$897 00	$1217 48	52	36	64	4486	$2114 48
Week ending Dec. 5....	492	522	$210 00	$273 55	14	9	16	1014	$483 55
" " 12....	518	513	210 00	268 29	14	9	16	1031	478 29
" " 19....	518	513	210 00	269 12	14	9	16	1031	479 12
" " 26....	518	549	210 00	302 16	14	9	16	1067	512 16
	2046	2097	$840 00	$1113 12	56	36	64	4143	$1953 12

TABLE A—Continued.

FOURTH DISTRICT. — JAMES F. BUSEY, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, &c., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, &c.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	No. of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending Jan. 4....	685	849	$396 00	$405 00	22	10	25	1534	$801 00
" " 11....	751	695	396 00	405 00	22	10	25	1446	801 00
" " 18....	813	790	396 00	442 50	22	10	30	1603	838 50
" " 25....	731	961	396 00	459 00	22	10	31	1692	855 00
	2980	3295	$1584 00	$1711 50	88	40	111	6275	$3295 50
Week ending Feb. 1....	776	873	$396 00	$441 00	22	10	29	1649	$837 00
" " 8....	823	873	396 00	359 25	22	11	27	1696	755 25
" " 15....	856	845	396 00	394 50	22	11	26	1701	790 50
" " 22....	830	693	396 00	296 25	22	11	27	1523	692 25
	3285	3284	$1584 00	$1491 00	88	43	109	6569	$3075 00

Week ending March 1..	856	913	$396 00	$433 50	22	11	27	1769	$829 50
" " 8..	902	980	396 00	402 00	22	11	26	1882	798 00
" " 15..	899	681	396 00	248 25	22	11	27	1580	644 25
" " 22..	927	944	396 00	440 25	22	11	27	1871	836 25
" " 29..	944	955	396 00	395 25	22	11	27	1899	791 25
	4528	4473	$1980 00	$1919 25	110	55	134	9001	$3899 25
Week ending April 5..	931	973	$396 00	$354 00	22	11	27	1904	$750 00
" " 12..	969	1022	396 00	374 95	22	12	27	1991	770 95
" " 19..	842	930	330 00	319 50	22	12	27	1772	649 50
" " 26..	972	926	330 00	321 75	22	11	24	1898	651 75
	3714	3851	$1452 00	$1370 20	88	46	105	7565	$2822 20
Week ending May 3...	759	919	$330 00	$414 00	22	11	24	1677	$744 00
" " 10...	864	960	330 00	414 00	22	11	24	1824	744 00
" " 17...	900	925	330 00	404 25	22	11	23	1825	734 25
" " 24...	745	771	330 00	346 50	22	11	23	1516	676 50
" " 31...	797	943	330 00	423 00	22	11	25	1740	753 00
	4065	4517	$1650 00	$2001 75	110	55	119	8582	$3651 75

TABLE A—Continued.

FOURTH DISTRICT. — JAMES F. BUSEY, SUP'T.	Garbage and Ashes Removed.	Street Dirt, Sand, &c., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, &c.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	No. of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending June 7..	758	955	$360 00	$372 00	20	9	21	1713	$732 00
" " 14..	721	895	360 00	365 70	20	9	21	1616	725 70
" " 21..	781	928	360 00	372 00	20	9	21	1709	732 00
" " 28..	721	917	360 00	372 00	20	9	21	1638	732 00
	2981	3695	$1440 00	$1481 70	80	36	84	6676	$2921 70
Week ending July 5...	719	961	$360 00	$365 00	20	9	21	1680	$725 00
" " 12...	655	976	360 00	372 00	20	9	21	1631	732 00
" " 19...	715	908	360 00	354 00	20	8	21	1623	714 00
" " 26...	729	839	360 00	372 00	20	9	21	1568	732 00
	2818	3684	$1440 00	$1463 00	80	35	84	6502	$2903 00

Week ending Aug. 2...	784	943	$360 00	$372 00	20	9	21	1727	$732 00
" " 9...	794	950	360 00	363 17	20	9	21	1744	723 17
" " 16...	834	1027	360 00	372 00	20	9	21	1861	732 00
" " 23...	879	906	360 00	306 59	20	9	21	1785	666 59
" " 30...	814	1025	360 00	372 00	20	9	21	1839	732 00
	4105	4851	$1800 00	$1785 76	100	45	105	8956	$3585 76
Week ending Sept. 6...	793	845	$360 00	$336 62	20	9	21	1638	$696 62
" " 13...	783	1007	360 00	372 00	20	9	21	1790	732 00
" " 20...	741	928	360 00	297 14	20	9	21	1669	657 14
" " 27...	855	883	360 00	318 14	20	9	21	1738	678 14
	3172	3663	$1440 00	$1323 90	80	36	84	6835	$2763 90
Week ending Oct. 4....	793	1012	$360 00	$372 00	20	9	21	1805	$732 00
" " 11....	780	994	360 00	372 00	20	9	21	1774	732 00
" " 18....	809	988	360 00	356 17	20	9	21	1797	716 17
" " 25....	792	873	360 00	262 91	20	9	21	1665	622 91
	3174	3867	$1440 00	$1363 08	80	36	84	7041	$2803 08

TABLE A—Continued.

FOURTH DISTRICT. — JAMES F. BUSEY, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, &c., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, &c.	No. of Garbage Carts Employed.	Number of Street Carts Employed.	No. of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending Nov. 1...	798	879	$360 00	$361 50	20	9	21	1677	$721 50
" " 8...	777	917	300 00	347 97	20	9	21	1694	647 97
" " 15...	756	921	360 00	295 96	20	9	21	1677	655 96
" " 22...	740	1001	360 00	352 50	20	9	21	1741	712 50
" " 29...	771	995	360 00	297 48	20	9	21	1766	657 48
	3842	4713	$1740 00	$1655 41	100	45	105	8555	$3395 41
Week ending Dec. 6....	893	968	$330 00	$313 27	22	9	21	1861	$643 27
" " 13....	856	945	330 00	306 12	22	9	21	1801	636 12
" " 20....	961	787	330 00	285 81	22	9	21	1748	615 81
" " 27....	940	933	396 00	335 48	22	9	21	1873	731 48
	3650	3633	$1386 00	$1240 68	88	36	84	7283	$2626 68

FIFTH DISTRICT.

JOHN T. LEE, SUP'T.

Week ending Jan. 5....	763	667	$378 00	$324 00	21	9	18	1430	$702 00
" " 12....	863	654	405 00	315 00	23	9	18	1517	720 00
" " 19....	886	1076	414 00	330 00	23	8	18	1962	744 00
" " 26....	892	1024	414 00	340 50	23	8	19	1916	754 50
	3404	3421	$1611 00	$1309 50	90	34	73	6825	$2920 50
Week ending Feb. 2...	878	1143	$414 00	$382 50	23	9	22	2021	$796 50
" " 9...	904	909	414 00	312 00	23	9	20	1813	726 00
" " 16...	885	890	414 00	295 50	23	9	20	1775	709 50
" " 23...	886	728	414 00	307 50	23	9	20	1614	721 50
	3553	3670	$1656 00	$1297 50	92	36	82	7223	$2953 50
Week ending March 2...	874	585	$414 00	$329 25	23	9	20	1459	$743 25
" " 9...	897	549	414 00	322 50	23	9	20	1446	736 50
" " 16...	862	429	414 00	252 00	23	9	20	1291	666 00
" " 23...	876	596	414 00	330 00	23	9	20	1472	744 00
" " 30...	742	551	345 00	279 75	23	9	20	1293	624 75
	4251	2710	$2001 00	$1513 50	115	45	100	6961	$3514 50

TABLE A—Continued.

FIFTH DISTRICT. JOHN T. LEE, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, &c., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, &c.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	No. of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending April 6...	852	569	$414 00	$297 75	23	9	20	1421	$711 75
" " 13...	856	588	379 50	327 75	23	9	20	1444	707 25
" " 20...	802	594	343 50	336 75	23	9	20	1396	680 25
" " 27...	825	539	345 00	257 95	23	8	18	1364	602 95
	3335	2290	$1482 00	$1220 20	92	35	78	5625	$2702 20
Week ending May 4...	824	528	$345 00	$303 00	23	8	18	1352	$648 00
" " 11...	825	500	345 00	293 25	23	8	18	1325	638 25
" " 18...	856	840	345 00	293 25	23	8	18	1696	638 25
" " 25...	838	597	345 00	299 25	23	8	18	1435	644 25
	3343	2465	$1380 00	$1188 75	92	32	72	5808	$2568 75

Week ending June 1...	781	548	$360 00	$305 28	20	8	18	1329	$665 28
" " 8...	799	575	360 00	299 83	20	8	16	1374	659 83
" " 15...	732	524	360 00	283 97	20	8	16	1256	643 97
" " 22...	712	608	360 00	304 00	20	8	16	1320	664 00
" " 29...	710	587	360 00	286 82	20	8	16	1297	646 82
	3734	2842	$1800 00	$1479 90	100	40	82	6576	$3279 90
Week ending July 6...	661	616	$360 00	$300 66	20	8	16	1277	$660 66
" " 13...	642	653	360 00	283 48	20	8	16	1295	643 48
" " 20...	649	656	360 00	304 00	20	8	16	1305	664 00
" " 27...	658	661	360 00	286 30	20	8	16	1319	646 30
	2610	2586	$1440 00	$1174 44	80	32	64	5196	$2614 44
Week ending Aug. 3...	624	608	$360 00	$304 00	20	8	16	1232	$664 00
" " 10...	684	600	360 00	299 82	20	8	16	1284	659 82
" " 17...	677	600	360 00	304 00	20	8	16	1277	664 00
" " 24...	724	594	360 00	302 50	20	8	16	1318	662 50
" " 31...	720	616	360 00	299 99	20	8	16	1336	659 99
	3429	3018	$1800 00	$1510 31	100	40	80	6447	$3310 31

TABLE A—Continued.

FIFTH DISTRICT. — JOHN T. LEE, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, &c., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, &c.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	No. of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending Sept. 7...	706	579	$360 00	$302 50	20	8	16	1285	$662 50
" " 14...	718	616	360 00	304 00	20	8	16	1334	664 00
" " 21...	715	616	357 00	304 00	20	8	16	1331	661 00
" " 28...	742	644	360 00	281 74	20	8	16	1386	641 74
	2881	2455	$1437 00	$1192 24	80	32	64	5336	$2629 24
Week ending Oct. 5...	730	633	$360 00	$304 00	20	8	16	1363	$664 00
" " 12...	751	604	360 00	301 00	20	8	16	1355	661 00
" " 19...	792	616	360 00	304 00	20	8	16	1408	664 00
" " 26...	752	560	360 00	254 95	20	8	16	1312	614 95
	3025	2413	$1440 00	$1163 95	80	32	64	5438	$2603 95

Week ending Nov. 2...	755	608	$360 00	$304 00	20	8	16	1363	$664 00
" " 9...	666	664	300 00	304 00	20	8	16	1330	604 00
" " 16...	759	664	360 00	279 40	20	8	16	1423	639 40
" " 23...	786	640	360 00	304 00	20	8	16	1426	664 00
" " 30...	776	636	360 00	255 62	20	8	16	1412	615 62
	3742	3212	$1740 00	$1447 02	100	40	80	6954	$3187 02
Week ending Dec. 7...	870	626	$345 00	$250 96	23	8	16	1496	$595 96
" " 14...	863	592	345 00	254 95	23	8	16	1455	599 95
" " 21...	859	528	345 00	241 29	23	8	16	1387	586 29
" " 28...	849	610	414 00	283 24	23	9	24	1459	697 24
	3441	2356	$1449 00	$1030 44	92	33	72	5797	$2479 44

TABLE A.—Continued.

SIXTH DISTRICT. — JOHN MEAGHER, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, &c., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, &c.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	No. of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending Jan. 6.....	1003	810	$504 00	$327 00	28	9	19	1813	$831 00
" " 13.....	987	810	504 00	322 50	29	9	19	1797	826 50
" " 20.....	976	900	504 00	297 00	28	9	19	1876	801 00
" " 27.....	1017	728	504 00	282 00	28	9	22	1745	786 00
	3983	3248	$2016 00	$1228 50	113	36	79	7231	$3244 50
Week ending Feb. 3....	1074	806	$504 00	$309 75	28	9	24	1880	$813 75
" " 10....	1014	687	504 00	259 50	28	9	23	1701	763 50
" " 17....	940	824	504 00	302 25	28	9	22	1764	806 25
" " 24....	1030	768	504 00	276 75	28	9	18	1798	780 75
	4058	3085	$2016 00	$1148 25	112	36	87	7143	$3164 25

HENRY LANCASTER, SUP'T.

Week ending March 3..	1004	844	$504 00	$305 25	28	9	18	1848	$809 25
" " 10..	962	418	504 00	251 25	28	9	17	1380	755 25
" " 17..	947	660	486 00	207 00	27	9	17	1607	693 00
" " 24..	924	504	486 00	339 00	27	9	18	1428	825 00
" " 31..	875	459	405 00	216 00	27	9	18	1334	621 00
	4712	2885	$2385 00	$1318 50	137	45	88	7597	$3703 50
Week ending April 7...	865	621	$486 00	$282 00	27	9	18	1486	$768 00
" " 14...	849	558	405 00	324 00	27	9	18	1407	729 00
" " 21...	843	554	405 00	291 00	27	9	18	1397	696 00
" " 28...	835	335	405 00	227 25	27	9	16	1170	632 25
	3392	2068	$1701 00	$1124 25	108	36	70	5460	$2825 25
Week ending May 5...	817	480	$405 00	$288 00	27	8	16	1297	$693 00
" " 12...	796	560	405 00	288 00	27	8	16	1356	693 00
" " 19...	788	560	405 00	288 00	27	8	16	1348	693 00
" " 26...	793	565	405 00	288 00	27	8	16	1358	693 00
	3194	2165	$1620 00	$1152 00	108	32	64	5359	$2772 00

TABLE A.—Continued.

SIXTH DISTRICT. — HENRY LANCASTER, Sup't	Garbage and Ashes Removed.	Street Dirt, Sand, &c., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, &c.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	No. of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending June 2...	755	568	$450 00	$282 00	27	8	16	1323	$732 00
" " 9...	684	640	432 00	274 92	24	8	15	1324	706 92
" " 16...	676	576	432 00	294 00	24	8	15	1252	726 00
" " 23...	637	672	432 00	294 00	24	8	15	1309	726 00
" " 30...	638	684	432 00	252 96	24	8	15	1322	684 96
	3390	3140	$2178 00	$1397 88	123	40	76	6530	$3575 88
Week ending July 7...	589	480	$432 00	$289 33	24	8	15	1069	$721 33
" " 14...	671	875	426 00	294 00	24	8	15	1546	720 00
" " 21...	645	640	432 00	294 00	24	8	15	1285	726 00
" " 28...	667	697	432 00	294 00	24	8	15	1364	726 00
	2572	2692	$1722 00	$1171 33	96	32	60	5264	$2893 33

Week ending Aug. 4...	679	753	$431 25	$292 33	24	8	15	1432	$723 58
" " 11...	698	770	432 00	294 00	24	8	15	1468	726 00
" " 18...	702	352	432 00	229 34	24	8	15	1054	661 34
" " 25...	710	417	432 00	294 00	24	8	15	1127	726 00
	2789	2292	$1727 25	$1109 67	96	32	60	5081	$2836 92
Week ending Sept. 1...	718	640	$432 00	$254 46	24	8	15	1358	$686 46
" " 8...	732	640	432 00	294 00	24	8	15	1372	726 00
" " 15...	732	496	432 00	227 67	24	8	15	1228	659 67
" " 22...	697	536	432 00	294 00	24	8	15	1233	726 00
" " 29...	726	480	432 00	252 13	24	8	15	1206	684 13
	3605	2792	$2160 00	$1322 26	120	40	75	6397	$3482 26
Week ending Oct. 6....	747	467	$432 00	$252 96	24	8	15	1214	$684 96
" " 13....	836	613	432 00	294 00	24	8	15	1449	726 00
" " 20....	794	628	432 00	294 00	24	8	15	1422	726 00
" " 27....	767	520	432 00	209 50	24	8	15	1287	641 50
	3144	2228	$1728 00	$1050 46	96	32	60	5372	$2778 46

TABLE A.—Concluded.

SIXTH DISTRICT. — HENRY LANCASTER, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, &c., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, &c.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	No. of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending Nov. 3...	815	436	$432 00	$257 63	24	8	15	1251	$689 63
" " 10...	816	466	360 00	252 96	24	8	15	1282	612 96
" " 17...	825	440	432 00	255 96	24	8	15	1265	687 96
" " 24...	887	544	432 00	294 00	24	8	15	1431	726 00
	3343	1886	$1656 00	$1060 55	96	32	60	5229	$2716 55
Week ending Dec. 1...	824	264	$360 00	$161 00	24	8	15	1088	$521 00
" " 8...	987	584	405 00	244 95	27	8	15	1571	649 95
" " 15...	1018	501	405 00	246 62	27	8	15	1522	651 62
" " 22...	1146	672	405 00	215 66	27	8	15	1818	620 66
" " 29...	1134	840	486 00	294 00	27	8	15	1974	780 00
	5109	2864	$2061 00	$1162 23	132	40	75	7973	$3223 23

TABLE B.

Report of Work done in the Department of Street Cleaning, for each month of the year, ending December 31st, 1883, and amount expended for Dumps, Tools and Incidentals; also total amount of receipts for Refuse, &c.

MONTH ENDING.	Total No. Loads Garbage collected and removed.	Total No. Loads Street Dirt, Sand, Snow, Ice, &c., removed.	Cost of Collecting and Removing Garbage.	Cost of Collecting and Removing Street Dirt, Sand, Ice, Snow, &c.	Cost of the several Dumps.	Expenditures for Tools, Incidentals, &c.	No. of Garbage Carts employed.	No. of Street Carts employed.	No. of Scrapers and Sweepers employed.	Total number of Loads of all kinds removed.	Total expenditures for work done in Street and Garbage Department.	Total amount of money received and paid to Comptroller.
January 31.	19,933	27,105	$10,161 00	$10,055 25	$345 00	$208 34	126	62	132	47,038	$20,769 59	$1,250 00
February 28	18,886	20,371	9,072 00	8,228 25	375 00	142 40	126	63	134	39,257	17,817 65	....
March 31.	20,477	17,228	10,007 25	8,467 57	380 00	413 09	126	59	125	37,705	19,267 91	....
April 30.	17,576	16,200	8,323 50	7,857 65	372 00	87 54	124	58	121	33,776	16,640 69	719 50
May 31.	17,500	18,256	8,296 50	8,705 75	381 00	152 00	124	54	112	35,756	17,536 25	....
June 30.	15,922	18,021	8 802 00	8,033 65	389 00	116 15	112	50	100	33 943	17,340 80	....
July 31.	14,686	17,912	8,595 00	8,018 29	384 00	208 59	111	50	99	32,598	17,205 88	723 00
August 31.	16,773	18,227	8,921 25	8,184 79	381 50	76 20	111	50	99	35,000	17,563 74	50 05
September 30.	15,675	16,499	8,397 00	7,404 42	375 00	145 75	111	50	99	32,174	16,322 17	....
October 31.	16,789	17,988	8,796 00	7,937 32	381 00	72 19	111	50	99	34,768	17,186 51	....
November 30.	17,115	17,235	8,394 00	7,583 35	389 00	56 72	111	50	99	34,350	16,426 07	....
December 31.	19,585	16,704	8,524 50	7,043 65	366 00	291 62	121	50	101	36,289	16,138 17	772 05
	210,908	221,746	$106,290 00	$97,526 94	$4,518 50	$1,879 99				432,654	$210,215 43	$3 514 60

TABLE C.

RECAPITULATION.

Total number of loads of garbage and ashes collected and removed from January 1st to December 31st, 1883, inclusive	210,908
Total number of loads of street dirt, sand, snow, ice, &c., collected and removed from January 1st to December 31st, 1883, inclusive	221,746
Total number of loads of all kinds removed during the twelve months ending December 31st, 1883	432,654

TABLE C—Concluded.

Total amount paid for collecting and removing garbage and ashes from January 1st to December 31st, 1883, inclusive	$106,290	00
Total amount paid for collecting and removing street dirt, sand, &c., from January 1st to December 31st, 1883, inclusive	97,526	94
	$203,816	94
Amount of money received for refuse from January 1st to December 31st, 1883, and paid to Comptroller	$3,514	60

TABLE D.

Showing the amount of Animal and Vegetable Garbage delivered to Contractors at Canton.

1883. MONTHS.	CANTON DUMP.	No. of Loads. Garbage.	No. of Loads. Markets.	TOTAL.
January...	J. Holdefer, Sup't..	673	170	843
February..	" " ..	486	136	622
March	" " ..	583	170	753
April	" " ..	492	136	628
May.....	" " ..	555	148	703
June..	" " ..	1,213	218	1,431
July.....	" " ..	1,097	214	1,311
August....	" " ..	1,454	228	1,682
September.	" " ..	1,733	367	2,100
October...	" " ..	984	280	1,264
November.	" " ..	635	287	922
December..	" " ..	611	303	914
		10,516	2,657	13,173

TABLE D—Concluded.

Showing the amount of Animal and Vegetable Garbage delivered to Contractors at Winans' Cove Dump.

1883. MONTHS.	WINANS' COVE DUMP.	No. of Loads. Garbage.	No. of Loads. Markets.	TOTAL.
January...	E. Pumphrey, Sup't.	302	35	337
February..	" "	290	32	322
March....	" "	399	47	446
April.....	" "	386	163	549
May.....	" "	618	165	783
June.....	" "	1,796	275	2,071
July.....	" "	1,606	280	1,886
August....	" "	2,436	298	2,734
September.	" "	3,028	299	3,327
October...	" "	1,293	250	1,543
November.	" "	595	136	731
December..	" "	495	68	563
		13,244	2,048	15,292

Total number of loads delivered at Canton and Winans' Cove dumps, 28,465.

TABLE E.

Showing Disbursements for the year ending December 31st, 1883.

Total amount expended for collecting and removing garbage, ashes, street dirt, &c., from January 1st to December 31st, 1883	$203,816 94
Amount expended for dumps from January 1st to December 31st, 1883	4,518 50
Amount expended for salaries from January 1st to December 31st, 1883	9,154 05
Amount expended for tools and incidentals from January 1st to December 31st, 1883	1,879 99
Paid Turner & Co. for removal of garbage.	10,625 00
	$229,994 48

TABLE E—Concluded.

Amount of appropriation for the Department of Street Cleaning for the year 1883	$227,875 00
Amount of special appropriation for the quarter ending October 1st, 1882, for removal of garbage from the city	2,125 00
	$230,000 00
Amount of appropriation expended	229,994 48
Unexpended balance	$5 52

ANNUAL REPORT

OF THE

CITY LIBRARIAN

TO THE

Mayor and City Council of Baltimore,

FOR THE

FISCAL YEAR ENDING DECEMBER 31, 1883.

REPORT.

BALTIMORE, January 2, 1884.

To the Honorable the Mayor
and City Council of Baltimore:

GENTLEMEN:

I have the honor of presenting this, the annual report of the City Librarian, for the fiscal year ending December 31, 1883.

The researches among the mass of old papers and documents, classifying the same, is progressing but slowly, owing to the fact that the daily duties of the office claim almost the entire time of myself and assistant.

Additions have been made to our collection of City Directories.

I have had the City Register's and Commissioners of Finance reports, from 1830 to 1882 inclusive, bound in four volumes.

It can scarcely be doubted that authentic plats, maps and records of land and topography are very valuable in the many questions so constantly arising concerning old boundaries, names, drainage, &c., to say nothing of the question of good taste, in preserving these succes-

sive foot-prints of our city's march along the path of progress, civilization and wealth. It is equally true that no city in the country is so inadequately provided with such records as the city of Baltimore. It is a matter of almost daily occurrence that the City Library is resorted to for information concerning old lines and boundaries that can only be obtained by the compiling of a set of maps of this character, and it is a matter that is yearly growing of greater importance. I consider that an urgent necessity exists for such a set of maps; the cost would be merely nominal.

It is with this impression that I would report that an opportunity is now offered to procure a series of such maps of our city, extending from its earliest infancy to its present manhood, and I respectfully suggest that an appropriation of $2,000, or so much thereof as is necessary, be made to procure these maps and have them properly prepared for filing in the City Library.

By Resolution No. 182, approved October 12, 1883, the sum of $309.58 was paid John Cox for printing done under authority by the late John S. Brown, City Librarian.

The sum of $30 was received from the sale of six copies of the Baltimore City Code.

The accompanying statement shows the cost of stationery and printed matter purchased for the several departments during the year.

Respectfully submitted,

SAMUEL D. SMITH,
City Librarian.

Statement of Value of Stationery and Printed Matter used during the year 1883.

Appeal Tax Court	$157 74
Baltimore City Jail	208 96
Bayview Asylum	144 56
City Collector	1,560 21
" Comptroller	280 64
" Register	463 99
" Commissioner	189 52
" Library	922 84
Commissioners for Opening Streets	81 89
" of Street Cleaning	38 93
Clerk Lexington Market	2 91
" Belair "	75
" Centre "	1 90
" Hollins "	41
" Fell's Point "	1 40
Dog-Pound Master	8 50
Examiner of Titles	11 03
Fire Commissioners	192 45
" Marshal	647 05
General Sup't Lamps, &c	106 50
Health Department	1,462 88
Harbor Master, 1st District	1 76
" " 2d "	11 65
" " 3d "	16 10
" " 4th "	11 09
" " 5th "	13 21
Harbor Board	153 22
Amount carried forward	$6,692 09

Amount brought forward		$6,692 09
Inspector of Buildings		73 55
" " Gas and Illuminating Oils		21 25
Law Department		31 63
Mayor		218 59
Supervisors of Elections		138 28
Superintendent of City Hall		12 46
Amount used for stationery and printed matter	$7,187 85	
Amount paid John Cox per Res. 182	309 58	
Amount of appropriation drawn	$7,497 43	
Amount of appropriation undrawn	2 57	
Amount appropriated	$7,500 00	
Water Department	$1,240 19	
Chief Engineer Water Department	279 53	
		$1,519 72

ANNUAL REPORT

OF THE

Board of Visitors of the Jail

OF BALTIMORE CITY,

TO THE

Mayor and City Council of Baltimore,

FOR THE

FISCAL YEAR ENDING DECEMBER 31, 1883.

Officers of the Baltimore City Jail.

Board of Visitors:

OTIS KEILHOLTZ, *President*, (Died Sept. 13).
WM. PINKNEY WHYTE, *Ex-officio.*
JAS. E. TATE, *President*, (Elected Oct. 3).
J. H. SIRICH, *Secretary.*
HARRY E. REINHARD,
JNO. H. HOLTHAUS,
JNO. RICHARDSON,
HARRY McCOY, (vice Keilholtz).

Committees:

FINANCE:
SIRICH.
REINHARD.

REPAIRS:
REINHARD,
HOLTHAUS.

SANITARY:
RICHARDSON,
HOLTHAUS.

SUPPLIES:
SIRICH,
REINHARD,

DISCIPLINE:
KEILHOLTZ, (Dec'd).
TATE,
McCOY.

J. F. MORRISON, *Warden.*
DR. D. P. HOFFMAN, *Physician.*
WM. H. H. TURNER, *Clerk.*

Deputy Wardens:

C. F. EDWARDS,
JNO. H. STUTT,
WM. H. CROSS,
THOMAS M. KENNY,
WM. H. TIBBELS.
JOSEPH C. SANNER,
CHAS. F. EDWARDS,
JOHN T. BARBER,
J. F. RIALS,
WM. H. JEFFERS,
RICHARD CARTER,
PETER P. KESTLER,
CORNELIUS McLAUGHLIN,
JOHN MAHON,
JOHN F. POTTER,
P. F. FLANNERY,
HENRY CRUSE.

JOHN H. STUTT, *Engineer.*
CHARLES W. MUHLY, *Baker.*
STEPHEN O'LEARY, *Gardener.*
MRS. CARRIE DOLL, *Matron.*
JAS. RATTY, *Hostler.*

REPORT.

BALTIMORE, January 1, 1884.

To the Honorable the Mayor
and City Council of Baltimore:

GENTLEMEN:

The Visitors of the Jail of Baltimore city respectfully submit the following report of the operations of the Institution entrusted to their management during the year ending December 31, 1883:

The report of the Warden and annexed exhibits embrace a summary of receipts and disbursements, a statement of the number of prisoners committed to the Institution during the year, specifying the offences with which they were charged, and the manner in which they were disposed of. The report of this officer contains many valuable suggestions which are deserving the attention of the corporate authorities. We fully endorse the recommendations made by him, and commend the same to your consideration.

There was expended by the Board during the year $49,999.84. A larger sum will be necessary for the maintenance of the Institution during the coming year, viz.: $59,710.50.

Owing to the meagre appropriation for the past year, supplies in every department have become completely

exhausted, and it will require a heavy outlay to renew them.

The entire earnings of the jail during the past year was $2,659.00.

The contract made with G. S. Griffith & Co., five years ago, for labor, expires in March of the present fiscal year, and as the Criminal Court no longer sentences prisoners to Jail for terms extending beyond thirty or sixty days, the Board fear they will have great difficulty in making another contract.

Nearly seventy-five per cent. of the prisoners confined in Jail belong to the peace or bummer class. The law prohibits compulsory labor for these persons, so that incarceration is no punishment whatever. In connection with this, we beg to call your attention to that portion of the Warden's report which treats of the crowded condition of the part set aside for those prisoners, and earnestly ask that the demands upon humanity and decency be complied with, and further accommodation be provided for this class of unfortunates.

We would recommend the construction of a wing at east side of Jail, to contain five hundred cells, for use of those committed for minor offences, such as mentioned above.

If this is adopted, it will enable us to use the side now set apart for the bummer class as a place of confinement for witnesses and minors.

It often happens in case of witnesses that they are compelled to remain a long time in prison, and are subjected to the rules and regulations that are enforced against those sent there as a punishment for crime.

Common justice requires that when the necessity exists for depriving such persons of their liberty, that suitable provision should be made to render their condition comfortable and free from evil consequences of prison life.

The reasons for the separation of minors from companionship with adult criminals is of equal importance.

Magistrates frequently commit to the Baltimore City Jail persons suffering from disease, also idiots and insane people, upon charges of breach of the peace. We regard this as one of the greatest evils of the present imperfect system of committals by magistrates. We would refer you to the recommendations in the Warden's report.

We ask that immediate steps be taken to remedy this radical defect, and would further ask that legislation be procured for compulsory labor, so as to be able to employ the prisoners committed as peace cases, and the establishment of a Police Court, with similar powers as the present Criminal Court.

We would urge that an increased water supply be furnished the prison, both for sanitary purposes and to prevent conflagration.

On January 2, 1883, two cases of small-pox appeared in the Jail in the section that contained three hundred and four prisoners. Communication was had at once with the Supreme Bench, who ordered the removal of the two prisoners to the Marine Hospital, and the immediate discharge of all the others, except those awaiting trial and under sentence. Previous to this

release all the prisoners had been vaccinated by the Jail physician.

The sanitary condition of the Institution since has been good, considering the overcrowding, to which we have before alluded.

Cleanliness and ventilation are enforced by stringent rules. The good health of the prisoners is the result of the strict observance of these requirements.

Religious exercises have been regularly conducted each Sunday by the representatives of different denominations, and every facility afforded these Christian people in their efforts to lead the outcast and criminals into a better way and better life.

September 13th we suffered a severe loss in the death of our President, the late Otis Keilholtz, and the following resolutions of sympathy and respect were unanimously passed:

"Whereas, Hon. Otis Keilholtz, the President of this Board, departed this life since our last meeting, and it is proper we should express our sincere regret at his death, and sympathy for his family in their great bereavement; therefore,

"*Resolved,* That we heard with sincere sorrow the announcement of his demise, knowing that we lost a valued friend, a true and faithful public officer, and an honest man; that we express the sentiment of all who knew him in describing him as a patriotic citizen, ever ready to aid his State when called into its service, and always coming up to the full measure of a faithful discharge of public duty;

"*Resolved,* That the Secretary send to his family a copy of these resolutions."

The large number of prisoners confined during the year, the few deaths which have occurred, and present excellent sanitary condition under the adverse circumstances hitherto recounted, are, without further comment, sufficient proof of the skill and fidelity with which Dr. D. P. Hoffman, Physician to the Jail, has discharged his duty.

The Board take pleasure in expressing their commendation of the services rendered by J. F. Morrison, Warden, under whose superintendence the affairs of the prison have been most satisfactorily conducted. His excellent executive ability is all that could be required in the management of the Institution, and its condition to-day is to a great extent attributable to his efficient services.

Respectfully submitted,

JAMES E. TATE,
J. H. SIRICH,
HARRY McCOY,
JOHN RICHARDSON,
HARRY E. REINHARD,
JOHN H. HOLTHAUS.

REPORT OF THE WARDEN.

REPORT.

BALTIMORE, January 1, 1884.

To the Honorable the Board of
Visitors of the Jail of Baltimore City:

GENTLEMEN:

I have the honor to submit herewith my annual report of the operations of the Jail of Baltimore City for the fiscal year ending December 31, 1883.

The total number of prisoners committed during the year was 7,783, of which number 5,323 were committed for drunkenness and minor offences, 2,141 were committed for trial, and 274 for the House of Correction, and 45 for the House of Reformation and Instruction for Colored Boys.

The daily average of prisoners for the year was 381½, being the largest for four years past. This shows an increase of 52 prisoners per day over the year 1880, 50 over 1881, and 18 over 1882.

The earnings of the jail for the year were $2,659.00; of this sum $1,072.30 was from labor in the carpet-shop; $1,372.10 was received from the United States docket, and $214.60 from city docket.

The appropriation by the Mayor and City Council for the fiscal year was	$50,000 00
Of this sum there was expended for salaries.	$22,326 35
Subsistence of prisoners	13,466 13
Hospital stores, Warden's subsistence, &c...	2,653 12
Fuel	5,006 10
Gas and electric light	2,728 52
For sanitary purposes, including tin, iron, lumber, kalsamine, disinfectants and various articles for the proper conduct of the prison	3,143 78
Clothing account	675 84
Total expenditures	$49,999 84

The contract with Messrs. G. S. Griffith & Co. for the labor of prisoners employed in weaving carpets, which was made in March, 1879, expires in March, 1884. I respectfully beg to call your attention to this fact, and suggest that some steps be taken to furnish employment for these prisoners.

During the fiscal year just closed, very few prisoners were given jail sentences, and even the very small number so sentenced were for very short terms.

At the time of writing this report there are only thirty-eight (38) sentenced prisoners in Jail, of which number but nineteen (19) are available for the work named. This small number renders the prison contract a heavy expense to the Jail, and no profit to the contractors.

On January 1, 1883, two (2) cases of small-pox were discovered in Section 4, which at the time contained 312 prisoners, confined in seventy cells. The over-crowded

portion of that part of the prison and the consequent imminent danger of the spread of the contagion, which pervaded to a great extent throughout the city, made prompt and decisive action necessary. I reported the matter to the Hon. Judge Phelps, of the Criminal Court, who convened the Supreme Bench, and a general order of discharge was given me by that honorable body, so that on the eve of January 1, 1883, I discharged 304 prisoners, all of whom were vaccinated previous to their liberation. On January 2, 1883, the prison was thoroughly cleansed, lime and disinfectants freely used, and the whole placed in a thorough sanitary condition.

The two pronounced cases were transferred to the Marine Hospital. With the foregoing exception the health of the prisoners has been remarkably good, when the crowded condition of the prison is taken into consideration. In this connection I beg to submit the following extract from the monthly report of Dr. D. P. Hoffman, physician to the Jail:

"I beg leave to call your attention to what is known as the 'Peace' side of the Jail. There are in all, seventy-five cells, and generally three times and often four times, as many as that number of prisoners committed for drunkenness and disorderly conduct, and properly belonging to that side. Now, it is not my province to say how or in what manner this class of prisoners are to be provided for, but I positively declare, and give it as my settled conviction, as physician to this institution, that four or five persons packed in a small cell must sooner or later engender disease of a virulent character, endangering the health of the whole

prison and attended with the most disastrous results. More especially will this be the case when the summer months arrive and the exhalations of the body from intense heat become profuse and foul. It is true that the large accumulations of prisoners of this class to which I refer is due to the law that imposes the thirty day penalty; but, inasmuch as we cannot change the law, some provision must be made to meet its effects by providing adequate accommodations. Humanity demands, and the health and safety of the prisoners require it."

The daily reports of Dr. D. P. Hoffman, physician to the Jail, show that there were 2,115 cases of various diseases treated by him during the year. Only five deaths occurred, viz.:

John Mohn, white, aged 27 years, congestion of the brain; Mary Dose, white, aged 40 years, anæmia; Alexander Yancey, mulatto, aged 23 years, consumption; Louis Cavanaugh, white, aged 64 years, apoplexy; Georgianna Thompson, colored, aged 17 years, consumption.

The Rev. Louis F. Zinkhan, Agent of the Prisoners' Aid Association, has been untiring in his efforts to better the condition of the prisoners discharged from the Jail.

Religious services were conducted as usual during the year. Catholic and Protestant Sunday Schools have been regularly held, the former by Mr. Henry M. Tiralla, of the Society of "St. Vincent de Paul," and the latter by the Rev. Louis F. Zinkhan. The earnest efforts of these gentlemen and their co-laborers meet with two great obstacles among the prisoners—obstacles

with which they do not have to contend in the penitentiary, or other prisons, where the terms of sentence are longer and the prisoners are more or less separated.

Of 7,783 prisoners, 5,323 served an average of twenty days each, and, owing to the limited accommodations of the Jail, were confined, sometimes, four in a cell.

This promiscuous association develops a moral contagion which the most earnest efforts can hardly arrest or conquer.

In my annual reports for the last three years I have called your attention to the great necessity for providing additional jail room to relieve the over-crowded condition of Section 4, where the "bummer" or "peace cases" are confined; to separate minors and children from other prisoners, and to provide quarters for witnesses other than those assigned them on Section 2, among the sentenced prisoners, where they are compelled to associate with convicted felons of various grades of crime.

There are to-day confined in the Baltimore City Jail over 300 prisoners, convicted of drunkenness and other misdemeanors, sentenced by the police justices, from whose decisions, under the existing laws, there is no appeal. These prisoners are committed in default of the payment of one dollar and costs, amounting in the aggregate to three dollars and seventy cents each. The records show that during the past year 5,323 prisoners of this class served on an average of twenty days each, and the law prohibiting compulsory labor, the results are, enforced idleness, vicious association, and no possibility for reform or prevention of repetition of the

offences for which they are in prison. To a few of these prisoners this confinement may be a genuine punishment, but to the great majority, especially during the winter months, it is a positive luxury. There are frequently persons confined in some of the cells of this section of the prison suffering from mania-a-potu and other diseases incidental to their debauched lives. This compels the crowding of the remaining cells to a greater extent than decency or humanity should subject even those degraded creatures. The remedies for these debased conditions are: First, legislation to provide compulsory labor; second, to provide sufficient room so that a separate cell can be assigned to each prisoner. The present system is wasteful of time, of opportunity, and of money, and renders nugatory the efforts of earnest men and women who, in the chapel and Sunday Schools, are striving to save something from these moral wrecks.

The Illinois Commissioners of Public Charities, in their report a few years since, say:

"It is this association in idleness which is the curse and condemnation of our present jail system. The effect of this association is to increase the number of criminals and develop their criminality. The innocent and the comparatively innocent are corrupted by the example, the conversation, and the direct teaching of more experienced transgressors. The lessons taught are: Contempt for authority; hostility to the law and its officers; the delights of vicious indulgence; the duty of revenge upon society for imaginary wrongs; the necessity of violence, of daring, and of sullen submission to punishment, and the best methods of success in criminal undertakings or vicious pleasures."

This extract from the report of the Illinois Commissioners is fully applicable to Section 4 of this Jail. No provision has yet been made for the accommodation of minors and children who are committed to the prison, and confined in Section 1, charged with various offences against the law. Neither has any provision been made for the accommodation of witnesses, who are, for prudential reasons, assigned to quarters on Section 2, which is otherwise devoted to prisoners undergoing sentence. They are there compelled to associate with convicts for whatever length of time may be necessary to bring the person charged with the offence, for which they are held as witnesses, to trial.

The victims of the law in such cases are, as a matter of course, the stranger, the poor, the friendless—persons who have little opportunity to make their grievances known, and of whose hardship the public seldom hears. It often happens that, in this way, the witnesses of a crime are the only persons punished for it, since they are imprisoned for a knowledge they could not help, while the criminal is liberated on bail, and, in the end, escapes either by paying a trivial fine, or is discharged by a jury. In other cities a house of detention is set apart for this purpose, where persons while being held as witnesses are not necessarily compelled to associate with convicted felons.

I respectfully beg to recommend either the erection of a wing to the east side of the Jail, in which proper quarters could be assigned to witnesses, minors, and female prisoners, or it could be so arranged as to furnish separate cells for the "bummers," say five hundred; or the erection of a prison, exclusively for females, along

the eastern side of the jail yard, entirely separate from the present building, in which case Sections 3 and 4 could then be arranged, with separate cells, for the use of "bummers." Should the latter suggestion be adopted, the upper rooms in the main front building could be utilized for the detention of witnesses and minors.

I beg to call your attention to another evil, viz.: The commitment to Jail by magistrates, of diseased and insane persons. It not unfrequently happens that these afflicted persons are sent to Jail upon a charge of breach of the peace, when they should have been committed to Bayview Asylum. In more than one case the committing magistrate has refused to reconsider the sentence so imposed, or to grant to the Jail authorities a release for the prisoner without the usual fine and costs. I suggest that legislation be had, giving power to either the Jail authorities, or the judge of the Criminal Court, to release such cases from the Jail and commit them to Bayview Asylum.

The following is the estimated value of utensils, tools and stock, of the several departments of the Jail:

Subsistence Department	$800 00
Engineers' Department, including blacksmith shop, tin shop, carpenter shop, store-room, boiler-room and furnace equipment	1,200 00
Furniture	5,000 00
Gardener's Department	950 00
Armory	500 00
Matron's store-room	50 00
Amount carried forward	$8,500 00

Amount brought forward	$8,500 00
Hospital Department	65 00
Sanitary Department	30 00
Carriages, carts, &c.	300 00
Three (3) horses	800 00
Clerk's office (furniture)	150 00
Pigs	75 00
	$9,920 00
Add estimated value of prison, out-buildings and grounds	400,000 00
Total value of city property in charge of Board of Visitors	$409,920 00

Considerable progress has been made by the Inspector of Public Buildings, such as repairs to the prison, paving roadway, &c. There still remains to be done about six hundred yards of paving; the renewal of steam heating apparatus; the ventilation, &c., of the work-shops; the protection of the dormer windows by iron gratings; arranging the dormer and main windows, so that they may be opened and shut from the lower tiers; cutting down main prison doors and placing iron grated transom above, for light and ventilation; the removal of the heavy wooden doors from the tower rooms, and substituting grated doors, the same as those now used on cells.

I beg to recommend that a larger water service be brought in from the street mains, as the present supply is entirely inadequate; also the location of four plugs, so located as to facilitate the flushing of sewers, and will also prove advantageous in case of fire—two (2) of

these plugs to be placed in the front, and two (2) in the rear of the Jail.

The present water pipes in the towers are so small that when the water is being used on the first tier none can be had on the four tiers above. When the prisoners are emptying their filth buckets the stench is so great as to necessitate the opening of the windows throughout the Jail. This can be avoided by a full supply of water in each of the towers, and placing traps in their respective sewer pipes. At present it is a straight and open lead pipe from the main sewer to the tower rooms and thence into the main body of the Jail.

A new upright tubular boiler of twenty-five horse power; one upright 1¼-inch worm heater, seven feet by two feet, with about two hundred feet of pipe and fitting are required for the kitchen and hot water supply. The present boiler is old and the tubes are liable to give out at any time. The present heater is too small to supply the necessary hot water for the Jail.

The great necessity for a larger supply of hot water in the laundry has long been felt, and I would suggest the use of the upright boiler, now in the Warden's house, for this purpose. I recommend the removal of the present steam apparatus, and the substitution of a hot air furnace. I also recommend the substitution of Radiators, for the purpose of heating the various sections of the Jail, in place of the long stretches of iron pipe now in use, and which are nearly worn out. Radiators were placed in the main guard-room last fall, by the Inspector of Public Buildings, which, by enlarging the main pipe and returning the current through the

Radiators, made a large saving of fuel over that heretofore used. To make the change in the heating of the sections previously alluded to, thirty-two (32) Radiators of not less than 133 feet of heating surface each, with 700 feet of pipe and fittings for the same, will be required.

The repairs to the furnaces will require 350 feet of pipe with fittings, three dozen cast-iron grate bars, 1000 arch brick and 500 fire brick.

The oven in the bake house requires extensive repairs.

The walls of the Warden's house, together with the towers on the same, need pointing up. Repairs to the roof, new spouting and leads are necessary, as also some minor repairs to the interior.

A memorandum of all these repairs has been placed in the hands of the Inspector of Public Buildings, who will, doubtless, ask for an appropriation for those that may commend themselves to his judgment.

Owing to the meagre appropriation for the past year, a large additional expense will have to be incurred for bedding, blankets, dry goods, prisoners' clothing, including shoes, all of which are at the lowest possible point consistent with health, comfort and cleanliness, and will require immediate renewal. I beg, therefore, to present for your consideration the following estimate of the probable cost for the maintenance of the prison for the present fiscal year:

Salaries	$22,400 00
General subsistence	16,000 00
Fuel	5,000 00
Sanitary	5,000 00
Hospital stores and private subsistance	2,500 00
Incidental expenses, including clothing for prisoners, shoes, dry goods, blankets and bedding	6,000 00
For lighting prison as per contract	2,810 50
	$59,710 50

The following suits were entered against the Jail authorities during the past year:

On January 10, 1883, George W. Watts and Kate Stirling were committed by Justice Cashmyer, charged with non-compliance with the law relative to compulsory vaccination. Upon their arrival in jail they were vaccinated by the prison physician, under existing prison rules. Watts entered a formal protest against being vaccinated, and subsequently, after being released, he entered suit against the Jail authorities for damages, which suit has since been decided in favor of the latter.

On March 2, 1883, Jacob Stauch was convicted in the Criminal Court on two charges of selling liquor on Sunday. The Court imposed a fine of $250.00 and costs, amounting to $264.38 in one case, and a sentence in jail for thirty days in the other. On June 2, 1883, he was released from jail, the Governor remitting the State's portion of the fine, and the Sheriff the city's portion. A. P. Jump, his attorney, entered suit in the City Court,

July 21, 1883, against the Jail authorities for labor performed by the plaintiff, while a prisoner in jail, at the rate of two dollars and fifty cents per day.

The custom of collecting a jail fee of thirty cents per day for prisoners sentenced for breach of the peace, was discontinued by order of the Board on January 2, 1883. The question of the legality of these fees was brought direct to your notice by the institution of a suit for alleged false imprisonment by Thomas N. McKenzie, counsel for a colored man by the name of Berry. The history of this case is as follows: Berry was sent to jail October last, charged with drunkenness, he being unable to pay his fine. Attorney McKenzie alleges that he paid the fine and costs, thereby procuring the man's release, and presenting the same to me was refused because of the non-payment of the jail fees. This case is still in court, no decision having been reached.

I submit for your consideration the following statements viz.:

Exhibit A, showing the receipts and expenditures for the year.

Exhibt B, showing the monthly average of prisoners for the year, and the daily average for the same period.

Exhibit C, showing the number of prisoners committed for various causes.

Exhibit D, showing the number of prisoners committed and how discharged.

Respectfully submitted,

J. F. Morrison, *Warden.*

TABLES.

EXHIBIT A.

DR. *Being a summary of Receipts and Expendi*

1883.			
Dec. 31—To	officers' salaries, physician, gardener and baker	$22,326	35
	To subsistence of prisoners	13,466	13
	To subsistence of Warden's family, hospital, &c	2,653	12
	To fuel	5,006	10
	To gas and electric light	2,728	52
	To sanitary account	3,143	78
	To clothing account, shoes, &c., for sentenced prisoners	675	84
	To amount paid to Comptroller, derived from various sources	2,659	00
		$52,658	84

EXHIBIT A.

tures for the year ending December 31, 1883. Cr.

1883.		
Dec. 31—By United States docket		$1,372 10
By City docket		214 60
By labor account, (Griffith & Co.)		1,072 30
By Mayor and City Council		49,999 84
		$52,658 84

Respectfully submitted,

J. F. Morrison, *Warden.*

EXHIBIT B.

Showing the Monthly or Daily Average of Prisoners from January 1 to December 31, 1883.

1883.

January	201
February	330
March	353
April	407
May	424
June	400
July	406
August	439
September	403
October	349
November	384
December	482
	4578

Daily average for 1883	381 6-12
Daily average for 1882	363 7-12
Daily average for 1881	331 7-12
Daily average for 1880	329 11-12

Respectfully submitted,

J. F. Morrison, *Warden.*

EXHIBIT C.

Showing the number of Prisoners committed for various causes during the year ending December 31, 1883.

CHARGES.	WHITE.		Total White.	COLORED.		Total Color'd	Grand Total.
	Men.	Women.		Men.	Women.		
Peace and drunkenness	3336	630	3966	935	422	1357	5,323
Larceny	429	46	475	297	107	404	879
Assault and battery	361	24	385	204	33	237	622
Assault with intent to kill	38	2	40	34	5	39	79
Obtaining goods under false pretences	44	2	46	8	2	10	56
Felony	8	....	8	4	....	4	12
Forgery	5	....	5	....	....	....	5
Burglary	37	....	37	25	....	25	62
Witnesses for State and United States	23	2	25	14	4	18	43
Selling liquor on Sundays, &c	33	....	33	3	....	3	36
Refusing duty on shipboard	29	....	29	20	....	20	49
Keeping gambling houses, etc	20	....	20	8	....	8	28
Violating internal revenue laws	5	....	5	2	....	2	7
Writing policies, etc	23	....	23	15	3	18	41
Smuggling	7	....	7	....	....	....	7

EXHIBIT C—Concluded.

CHARGES.	WHITE.		Total White.	COLORED.		Total Colo'rd	Grand Total.
	Men.	Women.		Men.	Women.		
Vagrancy	10	4	14	3	4	7	21
Perjury	4	....	4	5	....	5	9
Embezzling	8	....	8	2	....	2	10
Manslaughter	2	....	2	2	....	2	4
Attempting to poison	1	....	1	....	1	1	2
Common thief, etc	8	....	8	5	....	5	13
Keeping bawdy house, etc	3	2	5	2	10	12	17
Deserting seamen	18	....	18	7	....	7	25
Maltreating, etc	2	....	2	1	....	1	3
Passing counterfeit money	9	1	10	3	1	4	14
Pickpockets	5	....	5	6	....	6	11
Rape and attempt	1	....	1	8	....	8	9
Bastardy	....	....	....	3	....	3	3
Bigamy	1	....	1	1	....	1	2
Murder	8	....	8	5	....	5	13
Mutiny	3	....	3	2	....	2	5
Receiving stolen goods	7	1	8	4	1	5	13

Abortion	....	....	....	2	....	2	2
Contempt of courts, magistrates, etc	3	....	3	2	....	2	5
Infanticide	....	....	....	....	2	2	2
Desecrating graves	2	....	2	2	....	2	4
Mayhem	2	....	2	....	....	....	2
Violating condition of pardon	1	....	1	....	....	....	1
Opening letters	3	....	3	2	....	2	5
Arson	1	....	1	2	1	3	4
Suspicious characters	5	....	5	2	....	2	7
Illegal voting, etc	5	....	5	4	....	4	9
House of Correction	150	50	200	54	20	74	274
Colored boys for House of Reformation & Instruction	....	....	....	45	....	45	45
							7,783

Respectfully submitted,

J. F. MORRISON, *Warden.*

EXHIBIT D.

Showing the Number of Persons Committed and how Discharged, for the year ending December 31, 1883.

Total number of prisoners committed			7783
Sent to Maryland Penitentiary:			
White men	73		
" women	5		
		78	
Colored men	65		
" women	13		
		78	
Sent to Bayview Asylum:			
White men	5		
" women	4		
		9	
Colored men	1		
" women	1		
		2	
Pardoned by Governor of Maryland:			
White men		3	
Colored women		1	
Sent to St. Mary's Industrial School for Boys		3	
Amounts carried forward		174	7783

Amounts brought forward		174	7783
Sent to House of Refuge, boys		2	
Sent to Spring Grove Asylum, boy		1	
Sent to Maryland House of Correction:			
White men	150		
" women	50		
		200	
Colored men	54		
" women	20		
		74	
Sent to House of Reformation and Instruction for Colored Boys		45	
Removed Cases:			
White men		1	
Colored men		1	
Died in Jail:			
White men	2		
" women	1		
		3	
Colored men	1		
" women	1		
		2	
Discharged by Courts, magistrates, expiration of sentence and otherwise		6805	
Remaining in jail December 31, 1883		475	
			7783

Respectfully submitted,

J. F. MORRISON, *Warden.*

PHYSICIAN'S REPORT.

REPORT.

BALTIMORE, January 1, 1884.

To the Board of Visitors
of the Baltimore City Jail:

GENTLEMEN:

I herewith submit my report of the number of cases and character of diseases treated in the Baltimore City Jail for the year ending December 31, 1883.

It gives me pleasure to say, that the sanitary condition of the institution is and has been throughout the entire year, excellent. On the first day of the past year, two cases of small-pox entered the prison. They were immediately sent to the hospital provided by the city for such cases. The whole prison, numbering 306 persons, were thoroughly vaccinated with the most satisfactory success. The cells were well cleansed and walls lime-washed, and disinfectants freely employed in and on every part of the building. Every prisoner that entered the institution was required to be vaccinated. This was kept up during the prevalence of the epidemic, until the disease entirely disappeared from the city. A few weeks after the first two cases had been removed to the hospital, another entered and was immediately sent to the same place, and I am pleased to say, that during the prevalence and progress of the epidemic in the city, not a case originated in the Jail.

This course, pursued uninterruptedly, gave this happy result, and proved conclusively the efficacy of thorough vaccination, which, with proper attention to cleanliness and the liberal use of disinfectants, will, to a very great extent, if not altogether, protect and prevent the spread of the disease. The vigilance, care and painstaking of the Warden, his quickness to discern, and sound judgment to direct, whatever was necessary to be done to give cleanliness to the institution, and the healthfulness that necessarily follows; his promptness in enforcing the discipline of the prison makes him an executive of unsurpassed ability and worthy of the highest commendation.

In my monthly report to the Warden, I have referred to the condition of the peace-side of the prison. You will perceive that I have laid a good deal of stress upon the danger arising from cells so over-crowded and so closely packed with human beings, of proving to be a fruitful source of generation and propagation of some malignant disease, especially in the summer months, when the constant and free exhalations from the body, becoming fœtid and foul, furnish the necessary elements for the production and dissemination of infectious disease. It would be a great misfortune that such a sad calamity should befall the institution.

There were four deaths: two pulmonary consumption; one suddenly, from apoplexy, and one of anæmia.

The tabular statements are herewith appended--the character of the diseases treated, results, etc.

Very truly yours,

D. P. HOFFMAN, M.D.

TABLES.

Report of Cases Treated in the Baltimore City Jail for the year ending December 31, 1883.

Abscess	5	Hæmorrhoids	20
Abortion	1	Hæmopthysis	11
Asthma	4	Heart Disease	8
Amenorrhœa	2	Intemperance	459
Bronchitis	20	Intermittent Fever	61
Burn	2	Inflammation Bowels	2
Boils	11	Irritation of Bladder	2
Bubo	5	Incontinence of Urine	1
Bruise	20	Liver Derangement	389
Constipation	204	Liver Congestion	2
Colic	7	Measles	3
Catarrh	106	Malarial Fever	9
Croup	1	Nervous Debility	36
Diarrhœa	109	Neuralgia	13
Dysentery	7	Opthalmia	10
Dyspepsia	61	Otitis	11
Delirium Tremens	12	Orchitis	4
Epilepsy	26	Pneumonia	5
Erysipelas	6	Paralysis	1
Fracture	2	Pleuritis	1
Felon	6	Rheumatism	126
Frost Bite	6	Retention of Urine	3
Gonorrhœa	43	Sprain	45
Gastric Irritation	2	Syphilis, secondary	5
Gleet	4	Syphilis, primary	20
Hernia	10	Stricture	2

Report of Cases Treated--Concluded.

Scald	8	Wound incised	31
Scrofula	15	" lacerated	11
Tonsilitis	40	" gunshot	1
Visicular eruption	3	" contused	2
Ulcer	67		
Vertigo	5	Total	2115
Womb disease	1		

SUMMARY.

White males	1,556
" females	103
Colored males	414
" females	42
Total	2,115

RESULT OF TREATMENT.

Cured	1,924
Relieved	153
Died	4
Under treatment	23
Sent to Bayview	11
	2,115

CAUSES OF DEATH.

Pulmonary Consumption	2
Apoplexy	1
Anæmia	1
Total	4

COLOR AND SEX.

White males	1
" females	1
Colored males	1
" females	1
Total	4

First Annual Report

OF THE

FIRE MARSHAL,

TO THE

Mayor and City Council of Baltimore,

FOR THE

FISCAL YEAR ENDING DECEMBER 31, 1883.

OFFICERS

OF THE

FIRE DEPARTMENT.

FIRE MARSHAL:

J. MONROE HEISKELL.

Secretary and Clerk:

WILLIAM S. LEMMON.

Chief Engineer:

JOHN M. HENNICK.

Assistant Engineers:

GEO. W. ELLENDER, THOS. F. MURPHY.

REPORT.

CITY HALL--OFFICE OF FIRE MARSHAL,

BALTIMORE, January 1, 1884.

To the Honorable the Mayor
and City Council of Baltimore:

GENTLEMEN:

Having been appointed Fire Marshal February 19, 1883, under an ordinance of the city, entitled "An Ordinance to provide for the appointment of a Fire Marshal, and to abolish the office of Fire Commissioners, and to vest in the Fire Marshal the functions of the Fire Commissioners of Baltimore city, under Article XX of Baltimore City Code of 1879," I beg herewith to submit my first annual report for the year ending December 31, 1883.

As will be seen, from the date of my appointment, fifty days of the year had elapsed before I assumed charge of the Department, consequently the expenditures for that period, and over which I had no control, must be included in my account.

The ordinance above referred to requires the members of the Department to abstain from active participation in politics, and in accepting the appointment of Fire Marshal I accepted the obligation to enforce it.

Under date of February 23, 1883, with this view, I issued an order to the Department, apprising them of the scope of the ordinance, and requesting them to render prompt and cheerful obedience to its provisions, and I am happy to state that, with but very few exceptions, the members of the Department readily acquiesced. Many of them stated to me that they were glad to be relieved of the necessity of doing the bidding of the ward politicians, and paying the assessment upon their already meagre salaries. In the few instances where the members disregarded my repeated warnings, they were promptly dismissed the service. I feel that I may now congratulate the city upon a thoroughly non-political Fire Department, the members of which know that they must depend upon their merit, and not political influence, for preferment.

CIVIL SERVICE RULES ADOPTED AND ENFORCED.

On the first day of April the terms of the officers and members of the Department expired, and it became my duty to reorganize the force for a term of four years. In pursuance of my determination to adhere strictly to civil service rules and business methods, I resolved to make no changes in the membership where the men were faithful and efficient. I accordingly requested the several Captains (then Foremen) to render

me a written report upon each member of their respective companies, and the Chief Engineer and his assistants to do likewise, regarding the Captains. From these reports it is gratifying to state that but few changes or dismissals were, in my judgment, necessary. Such as I deemed proper I promptly made, filling the vacancies from the substitutes bearing the best recommendation of their Captains. The plan thus inaugurated I have *strictly adhered to*, and have filled *all* vacancies by the promotion of those deemed most worthy by reason of length of efficient service in a *subordinate* capacity. This course serves as an incentive to the substitutes to qualify themselves for active membership in their companies, and give the Department excellent material from which to select new members when vacancies occur.

PERMANENT MEN APPOINTED WITHOUT COST TO THE CITY.

The Chief Engineer embodies in his report the action taken under the authority of an ordinance passed by the Council on April 23d, 1883, on my recommendation, by which an additional houseman has been made in the several companies named, and demonstrates the good gained by even this small addition to the permanent force of the Department. This benefit to the Department has long been felt and needed, and my predecessors asked an appropriation of $8,500 for this purpose. Reference to the Chief Engineer's report will show that it has been done without costing the taxpayers one dollar.

THE NECESSITY OF A FULL PAID DEPARTMENT.

I cannot too strongly urge upon you the *absolute necessity* for a full paid Fire Department for the city. I have neither the time nor space in a report of this nature to do the subject justice, but I hope and believe that an opportunity will be given me, and others interested in this most important subject, to present our views in full to the Council.

DISABLED FIREMEN.

At my urgent request, on the 23d of April, 1883, an ordinance was passed by the Council, and signed by his Honor the Mayor, appropriating the sum of $1,600 for the annual benefit of four of our disabled firemen, one of whom, Henry Heidrick, has since died, and under the provisions of which $833.25 has been expended; and as the appropriation was only made for the current year, I would most respectfully suggest that the same amount be again appropriated for this most worthy purpose, as these men are dependent upon it, and have rendered the city most faithful service.

THE INDICTED COMMISSIONERS.

Shortly after assuming charge of the Department, I was informed by the Chief Engineer that, in his opinion, there had been gross irregularities practiced by certain members of the late Board of Fire Commissioners in the conduct of the affairs of the Department. I considered this a confirmation of rumors which I had heard, and deemed it my official duty to the public, as well as protection to myself, to make a thorough inves-

tigation, as far as it lay in my power to do. Upon entering into this investigation, I was entirely dependent upon books and records left by them in the office, which had been kept under their own supervision, and upon the testimony chiefly of those who had been appointed by them, and therefore naturally unwilling to testify against them. There was nothing to show that any member of the late Board, except Messrs. Morrison and Regester, was implicated in any irregular transaction. The books show that these two members of the late Board had participated in such transactions, that I considered it my duty to make public, in self defense, lest I should be deemed equally guilty in concealing them. I accordingly laid the facts, with the proof, before the City Solicitor, who placed the matter in the hands of the State's Attorney, the result being the indictment of the whole Board of ex-Commissioners. In concluding this subject, I deem it but justice to Messrs. Hannah and Slingluff, (who frequently called to see me after assuming charge,) to say, that when I informed them of the extent of my investigation, that, after expressing their surprise, they both unhesitatingly said that it became my duty to make public what I told them was the result of my investigation. Messrs. Smith and Campbell but seldom, if ever, called upon me, and for that reason I did not communicate to them the facts which had come to my knowledge, or otherwise they, too, might have had the opportunity to so express themselves upon this subject.

THE NECESSITY FOR GREATER PROTECTION AGAINST FIRE.

I beg to refer you to that part of the report of the Chief Engineer, calling attention to certain portions

of our city entirely unprotected against damage by fire, which I feel confident must convince you of the great necessity of increasing the number of our engine companies. He shows the great distance from the nearest engine houses to large and thickly populated districts, and the consequent unavoidable delay in going to their assistance when most needed, and otherwise demonstrates the immediate necessity for the prompt action of the Council in the premises. *This want has long been felt and urged*, and recent events should serve as a warning of the possibility of some greater and more deplorable catastrophe. I sincerely trust that the Council will act without delay in this matter, and afford the fire protection so much needed to those of our citizens in the unprotected districts referred to.

APPARATUS.

The Chief Engineer forcibly shows the very great necessity for new apparatus, and points out where remodeling, in other instances, will make as good as new several engines now in the service. I sincerely hope that the time has come when prompt heed will be taken of recommendations of this nature, and the representatives of the people in the Council will see the great necessity of examining into the wants and requirements of this most important branch of the municipal service, and place the means at our command to render efficient and valuable service, no matter how large a conflagration we may be called upon to extinguish.

CHEMICAL ENGINES NEEDED.

These engines have been found most useful and economical in other large cities, and the Chief Engineer

of this Department has for several years recommended their adoption here. I concur most heartily in what he says of their value as a means of extinguishing fires of a certain character, and of their general use to the Department. The underwriters of the city have petitioned their adoption, which petition has been sent to the City Council, with our urgent endorsement. The Chief Engineer shows minutely how essential they are to the requirements of the Department, and I hope that the comparatively small expense required to procure them, will not be looked upon as an insuperable objection to their purchase. He asks for two engines of this character, and the authority to appoint three additional permanent men to operate them. We are already provided with accommodations for their shelter. The additional men will cost the city $2,400 per annum. I trust that another year will not find us behind other cities in this important improvement.

HARBOR PROTECTION.

I endorse all the Chief Engineer so clearly says, and so urgently recommends, upon the need of a suitable "Fire Boat" for the protection of our water front and shipping in the harbor, and hope that the Council will promptly see the necessity of providing this valuable and indispensable adjunct to this Department. The recent fires at the Canton elevator, Union dock and Tyson's mill, will convince those who will pay attention to this important subject, of the great assistance a boat of this character will prove to this Department.

REPAIRS TO ENGINE HOUSES.

The small amount of money appropriated for the repairs of the engine houses, and placed at the disposal of our efficient Inspector of Buildings, has been used most judiciously, and in a manner entirely satisfactory to this Department, and I cordially recommend that the matter be again entrusted to his charge.

SWINGING HARNESS NEEDED.

It has been clearly demonstrated in the Fire Departments of other cities, both large and small, that the swinging harness is far superior to the old style, and is a great relief to the horses, and very much more economical, as when the horses are not in service it remains suspended from the ceilings of the engine houses, and is not subject to the wear and tear incident to the old style, where it is kept constantly on the horses, and is greatly worn by continual rubbing against the stalls. I endorse most heartily what the Chief Engineer says upon this subject, and have ascertained that the number of sets required can be purchased at about his calculation, and the old harness received in part payment for the same.

A WAREHOUSE FOR STORAGE OF HORSE FEED AND GENERAL SUPPLIES.

We find that quite a saving can be made by purchasing horse feed and general supplies in larger quantities, but are at present without the means of storage. Our purchases for the stock of the Department are now

made monthly, for this reason. Many of the engine houses have not the accommodation for loose hay, and in consequence we are compelled to purchase for those houses baled hay at a much higher figure. Other horse feed has to be bought in the same way, and for the same reason. With a place of storage we could buy direct and derive the benefit secured by those from whom we now purchase. I find that other large Departments have just such accommodations, and we could readily rent, for a small amount, a place suitable for this purpose.

STORAGE OF COTTON IN WAREHOUSES.

I would respectfully call the attention of the Council to the urgent need of legislation, under such penalties as they may deem will insure thorough enforcement, in regard to the storage of cotton particularly, and other inflammable merchandise generally, in warehouses in the city. I would suggest as of the first importance the utter prohibition of fire of any kind in such warehouses. In the more Southern cities cotton is stored in warehouses peculiarly constructed for the purpose—of one story in height, with fire-proof divisions through them, and extending above the roofs—in which fire is at no time allowed.

Whilst the origin of the two late cotton fires in this city is unknown, the fact remains that in each instance there were offices in the building, and consequently stoves containing fire. The falling of the wall at the "Union Dock" cotton fire is, in the opinion of firemen of experience, but a repetition of an effect which has several times occurred from a similar cause.

The cotton being stored in large quantities in the warehouses, the first tiers resting against the outer wall acquires from the expansion caused by the heat and water combined, an almost irresistible force, and even the stoutest wall presenting less resistance than the heavy mass of cotton behind, must crack and fall. I would recommend the passage of an ordinance rendering it compulsory that, in the storage of cotton, such an avenue be left between the cotton and the wall as to allow of the inevitable expansion of the cotton under such circumstances, and room for the water to play upon the face of the bales.

Such an ordinance, if properly enforced, would have averted the deplorable accident to that brave fireman, J. V. Dougherty, at the recent "Union Dock" cotton fire, and the knowledge of such an existing precaution would inspire a confidence in the minds of the firemen and promote an efficiency so likely to be impaired by a constant repetition of such occurrences. The partial destruction of one of the new Hayes trucks at said fire will, I am sure, be looked upon by you as well as myself as nothing compared to the injury of one member of this Department.

"MORE FIRE-ALARM BOXES AND PLUGS."

I am pleased to see that the citizens in some portions of the city are taking this matter in hand and are calling the attention of their representatives in the Council to the very poor manner in which they are protected in this respect. The Fire Department succeeded in having permission granted by the last Council to have quite a number of boxes erected at important points,

but when the measure reached his Honor the Mayor it was found that no provision therefor had been made in the levy, and he in consequence was forced to veto it.

Each year has demonstrated the greater and growing necessity for increasing the number of fire-plugs, and I would call your attention to the remarks of the Chief Engineer upon this important subject.

"TWO MORE HOOK AND LADDER COMPANIES REQUIRED."

I recommend as utterly essential to the efficiency of this Department that it be provided with two additional Hook and Ladder Companies—one to be located in South Baltimore, and the other at some central point in the northeastern section of the city. The ground upon which to erect accommodations for these companies can be purchased at a moderate figure in each of these sections.

"ENLARGEMENT OF No. 6 ENGINE HOUSE."

During the last session of the Council I was asked by a committee of gentlemen of that body to accompany them to No. 6 Engine House to look into the expediency of enlarging the same by the purchase of the house in the rear. While there it seemed to be the unanimous sentiment of all present that the house as now constituted is entirely too small to accommodate comfortably the apparatus and horses, but still nothing was done to remedy the evil. I would suggest that a committee of the Council be again appointed to look into this matter.

RECREATION FOR PERMANENT MEN.

Believing that an occasional break in the monotony of service at the several engine houses would be appreciated by and beneficial to the housemen, and could be arranged by a system of transfers, so as to in no way impair the efficiency of the companies, as soon after consultation with the Chief Engineer, as it could be effected, I issued an order granting one day per month recreation to each of the permanent men. This seems to give general satisfaction, as it permits them to spend that time with their families, or attend to private business, without, as formerly, having to pay a substitute to act in their stead.

A SURGEON FOR THE DEPARTMENT.

When I came into this department I found that the Surgeon in charge (who afterwards resigned) was allowed by the Board of Commissioners $3.00 per visit for *but two* visits, to those disabled or injured in the discharge of their duty. The present Surgeon was appointed, (for want of authority to do otherwise) with the same understanding, and in consequence (as was the case with his predecessor) is dependent upon the private resources of the members to compensate him for attendance upon them, in excess of the visits designated. It strikes me, and I am sure that every tax-payer will agree with me, that the brave men who risk their lives daily in their defense, are entitled to more consideration, and I not only suggest, but most urgently recommend that authority be given us to make the compensation commensurate with the duties performed; or else provide him with a

salary which will entitle the injured members of the department to his services until convalescent.

"SUPPLIES OPEN TO COMPETITION."

Complaints having been made to me that heretofore the furnishing of supplies to this department was confined to a few persons in their respective lines of business, and that no opportunities were offered the business public generally to compete, I have made it a point to invite by advertisement and otherwise, proposals for all articles needed, in any quantity. I believe this mode to be only fair to the business men of our city generally, and most advantageous and economical to the department, and shall continue to adhere to it, being influenced only by the desire to purchase the best goods from those offering them at the lowest prices.

"REPAIRS ON THE COMET ENGINE."

This Engine, really on the reserve list for some time past, but forced for want of a better one into service at No. 7 Engine House, became, during the summer, in spite of continual *patching and plugging, utterly worthless* to the department, and we found ourselves without any engine available for first-class service in this most important section of the city. Messrs. Clapp & Jones, of Hudson, New York, through their agent, Mr. Barroll, of this city, made us the proposition to take the old engine and rebuild it as follows:

"Engine to be furnished with new boiler made of best boiler plate steel, being M. R. Clapp's patent, (circulating tubular); present boiler dome to be made to

fit new boiler, and to be repaired where required. Boiler to be covered with Russia iron, banded with brass-band, nickel plated. Lower moulding and top of dome to be nickel plated. The present barrel frame to be cut off and made shorter, and joined to boiler; the old cylinder and machinery to be placed on this frame and joined to it, and the boiler, as shown in blue print, marked 'Exhibit A,' attached to and made part of this contract. The steam cylinder will be covered with brass, with a spun cover on the cylinder heads, nickel plated. There will be two new balance wheels, polished. The pump to be entirely new—M. R. Clapp's latest improved, made entirely of composition. The air chamber to be new, balloon shape, to be polished and fitted with a base on it; top to hold a signal lamp. There will be two discharge gates on pump, one on each side. The suction side of the pump will be connected to the bottom of the barrel frame, as shown in blue print, marked 'A,' and run on the inside of it to the front end, with connections for four suction hose, so that it can be swung around and be carried attached. Engine to be supplied with eighteen feet of suction hose (smooth bore). There will be a fuel pan on the back of the boiler, with necessary fender rails, suction holders and braces. The hind axle to be bent, so as to go around the back of the boiler over the fire door. The old platform springs to be used; the cross spring on the rear to go under the fuel pan, the front one to be put on top of axle. All material used to be of the very best quality of their respective kinds, and work to be done in the most workmanlike manner. All old material to be retained by the parties doing the work. The wheels

and all iron or steel work, not polished, to be painted with English Vermillion and striped with gold leaf. *The engine to be completely and thoroughly overhauled, and to be put in first-class working condition.*"

This proposition was virtually to make an entirely new engine, using but a small portion of the old one, and we considered the price named ($2,675,) compared with the price of a new one, or even the work done recently on No. 4 Engine, very moderate; and as they further agreed that the engine should be returned as soon as completed, and placed on trial in the department until the 1st of January, we accepted their offer, and we consider the engine, as proven by its service during the recent many large fires, fully up to their contract, and by far the most powerful engine of its size in the department.

FIREMEN AT THE THEATRES.

For the benefit and safety of the theatre-going public, I have deemed it prudent to place at the disposal of the managers of our several theatres, two members of the department, each night during the season, and find that this course meets with universal approval. Experience elsewhere has taught us that this precaution is both wise and necessary. The theatres are all provided with fire extinguishers, located at convenient places behind the scenes, which, in the hands of experienced firemen, can be used to great advantage in case of fire.

I trust that it will not be necessary to call the men into service at any of these theatres; but it must be comforting to the audiences to know that they are on hand in case of emergency. Since adopting this course

we are frequently called upon to furnish firemen (for the same purpose) at large gatherings and we gladly comply.

ELECTRIC WIRES.

The ground upon this *most important* subject, is so *fully and completely* covered by the Chief Engineer, (and he quotes at length the experience of other cities) that it only remains for me to ask that you give that portion of his report your careful attention and consideration, and that such steps be taken as are, in your judgment, most expedient to remedy this evil.

FURTHER PROVISION FOR THE FAMILIES OF FIREMEN KILLED IN THE DISCHARGE OF DUTY.

It strikes me as but just and considerate to the families of firemen *killed* in the discharge of their duty, that further provision should be made for their families. The city now provides $500, and they receive from the Insurance Company the same amount under the ordinance, placing insurance on the lives of the "call members," making a total of $1,000, which will be plainly seen is thoroughly insufficient to support a widow, to say nothing of children, should there be any.

In most cases firemen are compelled to live up to their incomes, and when taken off suddenly, their families are, as a rule, left in want. The $1,000 provided for as above, cannot be invested to render more than a very slight assistance in the maintenance of those *deprived* of a support. In view of these facts, I respecfully sug-

gest the propriety of your making a further allowance in such cases.

CASUALTIES.

I am happy to be able to state that injuries to members of the department have been few and slight in character, and that those injured during the year are well again and on duty.

But two deaths have occurred during my connection with the department. Ladderman Henry Heidrick, of No. 3 Hook and Ladder Company, died of consumption, May 11, 1883. He was not on the active roll at the time of his death, being placed upon the list of disabled firemen, provided for by Ordinance of the Council. He reaped the benefit of this provision but one month, having died six weeks after the appropriation was made.

Joseph V. Dougherty, member of No. 1 Hook and Ladder Company, died December 25th, 1883, from injuries received while in the discharge of his duty. The department lost a faithful and efficient member, and his untimely death will be long regretted.

EXPENDITURES FOR 1883.

I append a table of the expenditures of the department, including in a separate column the amounts expended and contracted for by my predecessors, for the period of the year (fifty days) alluded to in the beginning of this report, and before I assumed charge of the department, by reference to which you will see the very small amount of money left at my disposal, and

which had to be nursed for the actual and most pressing needs of the Department:

Items.	Amount expended by Board in January and February, 1883.	Amount expended by Marshal in 10 months of 1883.	Total, 1883.	Estimate of Board for 1883.
Salaries	$20,117 08	$102,552 46	$122,669 54	$120,091 88
Apparatus & Repairs	11,164 80	2,254 93	13,419 73	26,200 00
Accidents	136 37	174 97	311 34	2,000 00
Feed	1,940 84	6,440 35	8,381 19	10,000 00
Fuel	866 88	1,265 66	2,129 54	2,500 00
Furniture	120 82	90	121 72	2,500 00
Harness	253 64	364 59	618 23	1,500 00
Horse Shoeing	173 08	1,043 18	1,216 26	1,300 00
Hose	10,963 00	100 00	11,063 00	8,000 00
Horses	1,297 55	375 75	1,673 30	4,000 00
Ground Rent	185 25	703 01	888 26	888 24
Gas	301 73	645 27	947 00	1,500 00
Oils, Grease, &c	240 19	716 09	956 28	1,100 00
Office Expenses	467 56	532 13	999 69	850 00
Miscellaneous	390 50	700 05	1,090 55	1,500 00
Washing	204 00	1,020 00	1,224 00	1,400 00
Insurance	2,385 00	.....	2,385 00	2,400 00
Telegraph	*5,892 29	†8,037 95	13,930 24	17,550 00
	$57,100 58	$126,924 29	$184,024 87	$205,280 12

* $1,400 of this amount was paid for salaries.

† $7,000 of this amount was paid for salaries.

I also add the estimate of my predecessors for the sums required according to their ideas for the year, by which it will be seen that I have practiced the most rigid economy, and have managed to preserve the full efficiency of the department, at a cost of $184,024.87, for which they deemed $205,280.25 necessary—a difference of $21,255.25. I asked in my estimate (based upon the closest possible calculation, and the most reliable information I could gain, in the short time I had been in the department) for $189,062.20 from which the Council

struck off $5,000, which sum would have carried us through the year easily, and left a handsome surplus to turn over to the city.

THE PERSONNEL OF THE DEPARTMENT.

I cannot conclude my report without paying a just tribute to the officers and members of this department, who have so faithfully and cheerfully performed the duties exacted of them—in many instances of the most onerous nature, and always attended by a greater or less degree of self-sacrifice. Although compelled to work under a system at such great variance with those of other large cities, I think the men themselves are fully equal to the firemen of any other department in the country.

I append my estimate of the sums required, for what I consider the absolute necessities of the department for the fiscal year. I have thought it best to state in detail some of the more important items, and hope that they will meet with your approval:

ESTIMATE FOR 1884.

Salaries	$123,600 00
Apparatus and repairs, including three (3) new engines, new boilers and rebuilding Nos. 1 and 3 engines, two chemical engines, one new truck, two new hose carriages, rebuilding damaged truck, and general repairs to apparatus for the year..	27,100 00
Accidents	2,000 00
Feed	10,000 00
Amount carried forward	$162,700 00

Amount brought forward	$162,700 00
Fuel	2,500 00
Furniture	1,000 00
Harness (28 sets of swinging harness)	3,000 00
Horse-shoeing	1,300 00
Sucking sleeves	1,500 00
Horses	3,000 00
Ground rents	888 26
Gaslight	1,500 00
Oils, grease, &c	1,200 00
Office expenses (including printing report, messengers' salary, advertising, &c.)	1,000 00
Miscellaneous	1,500 00
Washing	1,400 00
Insurance	1,737 60
Telegraph	13,500 00
	$197,725 86

REPORT OF THE SUPERINTENDENT OF POLICE AND FIRE ALARM TELEGRAPH.

The Superintendent makes several most valuable and essential suggestions. He clearly shows the importance of placing fire-alarm boxes in the public schools, and calls attention to other matters directly connected with his department which are of great moment to the community. I endorse all that he so forcibly says upon these important subjects, and commend his report to your careful consideration.

Very respectfully,

J. MONROE HEISKELL,
Fire Marshal.

EXHIBITS.

EXHIBIT A.

Appropriation.

Amount appropriated by City Council for 1883	$184,062 20
Amount drawn from City Comptroller	184,024 87
Balance undrawn	$37 33

EXHIBIT B.

Special Appropriation.

Amount appropriated by City Council for disabled firemen	$1,600 00
Amount drawn from City Comptroller	833 25
Amount undrawn	$766 75

EXHIBIT C.

General Receipts.

Balance on hand--store-room stock--December 31, 1882	177 88
Amount drawn from City Comptroller for expenses of Fire Department, for the year 1883	184,024 87
Amount received from sale of manure and old material	319 64
Amount received from Accident Insurance Company, indemnity for injured members of the Department	217 60
	$184,739 99

EXHIBIT D.

General Expenditures.

Showing the amount expended on each account for the year ending December 31st, 1883.

Salaries	$122,669 54
Apparatus and repairs	13,432 56
Accident	311 34
Feed	8,381 19
Fuel	2,129 54
Furniture	121 72
Harness	618 23
Horse-shoeing	1,216 26
Hose	11,063 00
Horses	1,673 30
Ground rent	888 26
Gaslight	947 00
Oils, grease, &c	969 13
Office expenses	999 69
Miscellaneous	1,090 55
Washing	1,224 00
Insurance	2,385 00
Fire-alarm telegraph	13,930 24
	$184,050 55
Insurance indemnity received from the company and paid to members of the department	217 60
	$184,268 15

EXHIBIT E.

Company Expenditures.

Showing amount expended by each company during year ending December 31, 1883.

Engine Company No. 1	$8,504 37
" " 2	9,076 72
" " 3	8,139 75
" " 4	9,884 62
" " 5	9,934 85
" " 6	9,672 07
" " 7	9,962 87
" " 8	8,222 35
" " 9	9,518 68
" " 10	8,232 18
" " 11	8,418 75
" " 12	10,019 07
" " 13	8,237 15
Hook and Ladder Company No. 1	11,474 44
" " " 2	11,034 73
" " " 3	7,267 26
" " " 4	8,428 01
	$156,027 87
Reserve apparatus, officers' salaries, repairs and miscellaneous	$13,092 75
Office expenses	999 69
Fire-alarm telegraph	13,930 24
	$184,050 55

EXHIBIT F.

General Statement.

Receipts from all sources for 1883.....		$184,739 99
Expenditures for 1883.....	$184,268 15	
Amount paid City Register..	319 64	
	$184,587 79	
Balance:		
Stock store-room, December 31, 1883.....	152 20	
		$184,739 99

REPORT

OF THE

CHIEF ENGINEER.

REPORT.

BALTIMORE, January 1, 1884.

J. MONROE HEISKELL, *Fire Marshal*,

DEAR SIR:

I have the honor to submit to you the annual report of the condition and workings of the Fire Department for the fiscal year ending December 31, 1883.

GENERAL OFFICERS.

Chief Engineer	1
Assistant Engineers	2
Superintendent of Machinery	1
Veterinary Surgeon	1
Total	5

PERMANENT FORCE, UNIFORMED.

Enginemen of Steamers	13
Assistant enginemen of steamers	13
Drivers of steamers	13

Tillermen of hook and ladder trucks	4
Drivers of hook and ladder trucks	4
Permanent firemen and laddermen	16
	63

MEMBERS AT CALL UNUNIFORMED.

Captains of companies	17
Firemen of engine companies	91
Laddermen of hook and ladder companies	31
Total	139
Total number of employees	207

ORGANIZATION.

There are thirteen engine companies, and four hook and ladder companies.

SALARIES.

Chief Engineer	$2,000 00
Assistant Engineers	1,400 00
Superintendent of Machinery	1,400 00

SALARIES OF PERMANENT MEMBERS.

Enginemen of steamers	$1,100 00
Assistant enginemen of steamers	900 00
Drivers of steamers	900 00
Tillermen of hook and ladder trucks	900 00
Drivers of hook and ladder trucks	900 00
Permanent firemen and laddermen	800 00

SALARIES OF CALL MEMBERS.

Captains of companies	$500 00
Firemen of engine companies	400 00
Laddermen of hook and ladder companies	400 00

The Department has in service the following apparatus:

Thirteen (13) steam fire engines in regular service.

Four (4) steam fire engines in reserve.

Twenty-six (26) four-wheel hose carriages—thirteen in regular service, and thirteen in reserve.

Eleven steam heaters for the engines, located at Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 11 and 12 Engine houses.

Four (4) hook and ladder trucks in regular service—two of Hayes' extension ladder trucks and two bank ladder trucks. Two hook and ladder trucks in reserve—one Hayes' truck and one bank ladder truck.

FIRE EXTINGUISHERS.

There are thirty-five (35) extinguishers, of the following capacity, viz.: Two (2) fifteen gallons; two (2) eight gallons; thirty-one (31) five gallons—two (2) of which are carried on each truck, and two (2) on each hose carriage.

There are seven (7) Concord wagons, painted red, with large gongs attached to the dash-boards. Four (4) of these are used by the officers, two (2) by the fire-alarm telegraph, and one as a supply wagon. They are located at the following houses:

That of Chief Engineer at No. 2 Engine house.

Assistant Engineer, eastern district, No. 6 Engine house.

Assistant Engineer, western district, No. 4 Hook and Ladder Company's house.

Superintendent of Machinery, No. 1 Engine house.

Superintendent of Telegraph, No. 4 Hook and Ladder Company's house.

Lineman of Telegraph, No. 13 Engine house.

Supply wagon, No. 4 Hook and Ladder Company's house.

APPARATUS.

Two first-class Hayes' trucks, with extension ladders, were purchased from the La France Company in March, 1883. They cost $3,500 each. They were placed in service at Nos. 1 and 2 Hook and Ladder Companies. The Hayes' truck that was purchased three years ago, and has been in service at No. 1 Hook and Ladder Company since, is stored at the house of No. 4 Hook and Ladder Company as a reserve, and is used at large fires, or when accidents happen to the other Hayes' trucks.

No. 4 ENGINE—*Received March* 10, 1883.

This engine has had a quick-steaming boiler put on, yokes and eccentric altered, machinery overhauled, and all the metal and bright work nickel-plated; work done by the La France Company; cost $1,600.

No. 7 ENGINE.

An old engine, known as the Comet, which was purchased from the Vigilant Fire Company, when the present department was organized twenty-five years ago and was no longer fit for service, was partly used in building the new engine. The parts used were the front running gear, wheels, frame and steam cylinder; the balance of the engine is new. It has a quick-steaming boiler, and was altered from a horizontal to a vertical motion. The work was done by the Clapp & Jones Company, and cost $2,600.00, complete, with sucking sleeves and all necessary tools.

AMOSKEAG ENGINE.

This engine has had a new fire-box and flues put in the boiler; all the machinery overhauled and some alterations made; new hind axles and wheels.

APPARATUS REQUIRED AND ALTERATIONS.

I would recommend that quick-steaming boilers should be placed on No. 1 and No. 3 Engines, and that the machinery should be altered to conform to the increased speed and power that will be obtained; and by making this improvement, it will give the department two reliable first-class engines, that will be able to do efficient service, with two one inch and a quarter, or four seven-eights of an inch streams when required. And also, that three new engines of the most improved make should be purchased, to replace three of the old ones. The engines Nos. 2 and 6 Companies have in service, and two of the reserve engines, are old and not

reliable, and need a great deal of repairing. They could be given in exchange as part payment for new ones.

I would also recommend that a Hayes' Truck, with a sixty-five foot extension ladder, should be purchased and stationed at No. 4 Hook and Ladder Company. The truck they are now using is one of the old style, with the ladders banked, one on top of the other—the longest ladder being forty-five feet, which has to be raised by absolute manual labor. There are hundreds of first-class dwelling houses and several hotels in the District, that are from fifty to eighty feet in height, and this is the only truck that responds to the boxes on the first alarm; and when a fire occurs in a building of this description, the ladders they have are of no use, and by not having proper apparatus, may cause a loss of life that could otherwise be avoided. And also, that two four-wheel hose carriages should be purchased to replace the old ones now in service at No. 7 and No. 13 Engine houses. New hind wheels are required for Nos. 12 and 13 Engines and two fifteen gallon fire extinguishers, to be carried on No. 2 Hook and Ladder Truck.

All the apparatus was thoroughly done up before the parade in September last.

HORSES.

There are seventy-four (74) horses in the department, distributed as follows:

Thirteen engines, two horses each	26
Thirteen hose carriages, two horses each	26
Four hook and ladder trucks, two horses each	8

For use of Fire Marshal	1
For use of Chief Engineer	2
For use of Assistant Engineers	2
For use of Superintendent of Telegraph	1
For use of Superintendent of Machinery	1
For use of Lineman of Telegraph	2
For use of Veterinary Surgeon	1
Held in reserve	1
	71

During the past year, five horses have been purchased, six disposed of, and three died. All the horses are in good condition, with the exception of eight. Ten horses are required to replace the ones worn out, and for reserves.

HARNESS.

Two double sets of the Berry patent swinging harness, have been placed in service at No. 4 Engine Company. They are an excellent improvement over the old way of the harness being kept on the horses, as it saves the harness, and is a great relief to the horses, especially in warm weather. I would recommend that this style of harness should be procured for all the companies. Twenty-eight (28) double sets will be required, and will cost about $3,000.00. The old harness can be sold or exchanged.

HOSE.

There is in service sixteen thousand, eight hundred and fifty (16,850) feet of double jacket cotton fabric

hose, and eighteen thousand, seven hundred and fifty (18,750) feet of gum hose. It is distributed amongst the companies as follows:

	FABRIC HOSE.	GUM HOSE.
No. 1 Engine Co.....	1,400 feet.	950 feet.
No. 2 Engine Co.....	1,950 "	1,000 "
No. 3 Engine Co.....	1,500 "	1,600 "
No. 4 Engine Co.....	2,000 "	750 "
No. 5 Engine Co.....	1,000 "	1,800 "
No. 6 Engine Co.....	1,200 "	1,700 "
No. 7 Engine Co.....	1,200 "	1,800 "
No. 8 Engine Co.....	400 "	1,500 "
No. 9 Engine Co.....	1,000 "	2,250 "
No. 10 Engine Co.....	500 "	1,300 "
No. 11 Engine Co.....	500 "	1,700 "
No. 12 Engine Co.....	1,500 "	1,500 "
No. 13 Engine Co.....	2,200 "	900 "
	16,850 feet.	18,750 feet.

Twenty-two thousand, six hundred and fifty feet of this hose has been purchased within the last three years; six thousand feet of gum hose and two thousand, five hundred feet of the fabric hose in April, 1881; six thousand feet of fabric hose in March, 1882; eight thousand feet of fabric hose in February, 1883, and one hundred feet since.

WORK DONE BY THE INSPECTOR OF PUBLIC BUILDINGS TO THE HOUSES OF THE DEPARTMENT DURING THE PAST YEAR.

New floors have been placed in the engine rooms at Nos. 3, 5, 6, 9 and 13 Engine houses. Towers to hang

the hose in, to properly dry and air them, have been erected at Nos. 2, 3, 6, 7, 8, 10, 11 and 13 Engine houses. At No. 3 Engine house, the ceiling of the engine-room has been wainscoted; the sides painted; an iron pipe put up, and an opening made in the ceiling to facilitate the members in getting down to the apparatus from the sleeping room; a large sky-light made above the first story, between the main building and stable; sleeping room, parlor and passage papered; all the outside wood work painted, and a new tin roof put on the stable. At No. 2 Engine house, four hundred feet of eight-inch terra cotta drain-pipe was laid to connect to the sewer on Howard street. At No. 7 Engine house, the wall on the north side in the first story has been taken out, and five stalls made for the horses, the front of the stalls being where the wall was, which alteration places the horses near the apparatus, and stands them facing towards the front of house; a sitting room made on Eutaw street where the yard was; sleeping and bath rooms papered; large door made in the stable to open on Eutaw street, and a new pavement put down. New pavements, with granite in the centre, for the apparatus to run on, have been put down at No. 5 Engine house and No. 2 Hook and Ladder Company's house. New floors have been laid in the stables at all the houses, and other necessary work done. All the houses are in good condition, except the one occupied by No. 5 Engine and No. 3 Hook and Ladder Companies.

FIRE ALARM BOXES.

There is an urgent necessity for an increased number of fire alarm boxes, as some sections, in a measure, are

unprotected in this respect. A fire occurred on the morning of May 10th, at 3 o'clock A. M., in a building, No. 138 West Madison street, where two lives were lost and one person crippled. The alarm was sent in from box 35, Biddle and Garden streets, which is several squares away from the fire, and caused the apparatus to go in the wrong direction, causing considerable delay in getting to the fire. A box to protect this vicinity has been asked for several times, to be located at the corner of Madison and Charles streets; and if it had been placed there, this disaster might have been averted. There are at the present time only one hundred and sixty-four (164) fire alarm boxes, which includes the fifteen (15) at the houses of the department, and six (6) at the police stations, and they are scattered over an area of more than sixteen (16) square miles. But fifteen new boxes have been put up in eight (8) years, that being the time since the line was built, and four (4) of this number are inside of houses, being paid for by the owners for their own protection. And since that time, thousands of new buildings have been erected in sections of the city where there are no fire alarm boxes in the near proximity.

The following are some of the localities where the boxes are required:

1. Lexington and Howard streets.
2. Camden and Sharp streets.
3. Charles and Farre streets.
4. Pratt and Hanover streets.
5. Jackson and Clement streets.
6. Smith's Dock and Gambrill's Flour Mills.

7. Holliday and Bath streets,
8. Front and Buren streets,
9. Saint Paul and Centre streets,
10. Charles and Madison streets,
11. Calvert and Eager streets,
12. Patterson and Fulton avenues,
13. Druid Hill avenue and Presstman street,
14. Mosher and Division streets,
15. Myrtle avenue and Lanvale street,
16. Bolton and Laurens streets,
17. Charles and Barnet streets,
18. Park and Preston streets,
19. Caroline and Chew streets,
20. Aisquith and Chew streets,
21. Boston and Leaken streets,
22. John and Lanvale streets,
23. Park avenue and Preston street,
24. Baltimore and Payson streets,
25. Monument and Caroline streets,
26. Bond and Lancaster streets,
27. Eden and Aliceanna streets,
28. Castle and Pratt streets,
29. Russell and Bayard streets,
30. McHenry and Scott streets,
31. Charles and Henrietta streets.

CHEMICAL ENGINES.

I recommend that two chemical engines should be purchased and placed in service at Nos. 1 and 4 Hook and Ladder Companies, to be run as auxiliaries to these companies. They will necessitate the appointing of three more permanent men to each one of these com-

panies. Chemical engines have demonstrated their value as a means of extinguishing fires, time and time again; and experience has abundantly shown that there is a class of fires where the chemical engine can do prompt and effective work, better than the ordinary engine, and minus the water damage incident to the use of the latter; and the hose used on them being light, can be carried on a man's arm up the stairway to the top of a high building in a short time, and the fire extinguished, where it would take considerable time to carry up the heavy hose; and this loss of time often allows the fire to get a headway and causes a serious loss of property. Some of the advantages of the chemical engine are summed up in the following statement:

In its simplicity it dispenses with complex machinery, experienced engineers, and steam. Carbonic acid is both the working and extinguishing agent. Its promptness, it is always ready. The chemicals are kept in place and the gas generated the instant wanted. Besides, it uses the only agent that will extinguish burning tar, oil or other combustible fluids and vapors. One cylinder can be recharged while the other is working, thus keeping up a continuous stream. Its small dimensions require but small area, either for work or storage, and in saving from destruction by water what the fire has spared.

LOCALITIES WHERE THE LIVES AND PROPERTY OF THE RESIDENTS ARE NOT PROPERLY PROTECTED.

In my reports for several years I have called attention to the large area in the northern part of the city,

lying between Harford avenue and Charles street. This section is thickly built up with first-class dwellings, and the residents have virtually no protection against damage by fire, as the nearest companies are so far distant, and have such heavy grades to ascend, that when a fire occurs it does a great deal of damage before assistance can be given. As an instance, a fire occurred on the morning of December 10th in a three-story building on Boundary avenue, near Greenmount avenue. The fire commenced in the basement, cutting off escape by the stairway. Luckily, there was a ladder near, and two ladies were taken from the windows; two others jumped from the windows, and one of them was badly injured. The house was burned out. The nearest engine company, No. 6, had a mile and a-half to come, and the nearest hook and ladder company, No. 4, more than two miles. Since the department was organized, twenty-five years ago, three companies have been organized, Nos. 9 and 11 Engine Companies and No. 3 Hook and Ladder Company, and located in the eastern section, and four companies have been organized, Nos. 8, 10, 12 and 13 Engine Companies and No. 4 Hook and Ladder Company, and located in the western section. But nothing has been done to protect this vicinity, although the residents have petitioned the City Council several times for the much-needed protection. And it would not be surprising at any time to hear of lives being lost at fires in this section, as people are liable to be caught in the upper stories of the buildings with no appliances on hand to rescue them. I would recommend that a house should be built somewhere in this locality, and a company organized and equipped with a

large double tank chemical engine and a hook and ladder truck. The chemical engine would be able to hold a fire in check until the arrival of the nearest steam engine, and when fires occurred in the lower stories of dwellings, where people were in the upper rooms, with their escape cut off by the stairways, the ladders would be on hand to rescue them.

There is also a large area in the southwestern section which has been thickly built up in the last few years that needs better protection than is now afforded it, as the companies are now located. A house should be built somewhere in the vicinity of Mount and Lombard streets—(there are two public schools near this locality)—and No. 8 Engine Company removed from their present location on Mulberry street to it. At their present location they are only six squares from No. 13 Engine Company. A new company should then be organized and equipped with a large double tank chemical engine, and stationed at the house on Mulberry street, formerly occupied by No. 8. Engine Company. A Chemical Engine Company only requires four members—a captain, driver and two firemen.

A house should also be built in the vicinity of Fayette and Ann streets for the accommodation of No. 3 Hook and Ladder Company. When this company was organized it was located temporarily at No. 5 Engine house, as it was then supposed, until a house could be built to accommodate them in a more desirable location. A house in the section named would place them in the centre of the boxes, where they respond on the first alarm, and when going to boxes in the northern section, (as they respond to all boxes on a line of Gay

street, from Madison street to the northern boundary) from their present location, they are delayed by the heavy grades they encounter; and as the house they are in has but one door, one company has to wait for the other to get out, which causes delay. Two companies should never be located in the same house, as every company is a protection to the neighborhood where it is stationed.

Another hook and ladder company should be organized, and a house built to accommodate them, somewhere in the vicinity of Charles and Henrietta streets, to afford protection to the lives and property of the people residing south of Pratt street. The manufacturing interests have centered in this section, and thousands of houses have been built, and many more are now building, to accommodate the people brought here who work at these establishments. There is a great demand for dwellings in this location. Starting from the west side of Spring Garden, the new wharves there are covered with large factories; along Ostend street to Leadenhall street, to Moale's Point and Ferry Bar, thence along the river front to Fort McHenry, and along the south side of the basin to Hughes street, we have a water front of over six miles, which is built up with factories of all kinds, packing-houses, grain elevators, ship and lumber yards, dry docks, and covered piers, with valuable merchandise stored in them—near to which lay the bulk of the shipping that enters this port, among which are six lines of foreign steamers. The nearest hook and ladder truck is No. 2, on Paca street, nearly three miles distant, and it takes them from fifteen to eighteen minutes to get to fires when

they occur at this point. There are three engines located south of Pratt street, but no truck, and it often occurs that they have to wait for ladders to get in the upper stories of buildings.

The neccessity for a hook and ladder company in South Baltimore was shown by the fire which occurred on the morning of December the 20th, at Tyson's mill, on Hughes street. The fire commenced in the top of one of the elevators, and if the ladders had been on hand, the streams from Nos. 2 and 12 Engines could have been carried on the roof and worked up to where the fire was, and the building saved. And the necessity was again felt at the fire which occurred at No. 7 Cuba street, Locust Point, on December 23d. There was a heavy snow storm prevailing at the time, which caused some delay to the apparatus in getting there, and as No. 2 Hook and Ladder Company, located on Paca street, is nearly three miles distant, considerable damage was done to the house and furniture before they could arrive with the necessary ladders and tools.

Another engine company is needed in the centre of the city. During the past twelve years there has been a great change made in the style of buildings in the commercial part of the city. Take for example, all that portion bounded by Baltimore, Camden, Light and Paca streets. Where there were dwellings it is now built up with large warehouses, five, six and seven stories high, many of them over two hundred feet in depth, and running back to narrow alleys, with other buildings of the same kind in the rear, and filled with costly, and, often, inflammable merchandise. The entire force of the department consists of thirteen (13) engine companies and

four (4) hook and ladder companies, and it is expected with this small force to protect a closely built up and thickly settled city, containing over sixteen square miles of ground. And it is not safe to allow more than eleven engine companies and three hook and ladder companies to go in service at any fire, no matter what may be the magnitude of it; for in case of another large fire occurring while the engines were in service and the hose laid off, if there were no companies kept in reserve to respond, it would soon become a conflagration. The department should be increased, by the addition of another engine company, and locating it in the centre of the city. There has been no increase to the number of companies in the business part of the city since the organization of the department, twenty-five years ago, and as values are constantly increasing, it will presumably increase the number of fires, and add to the labor of fire protection. The distance from No. 2 Engine house on Barre street, to No. 4 Engine house on Lexington street, is thirteen squares, and from No. 1 Engine house on Paca street, to No. 3 Engine house on Lombard street, near High is eighteen squares. This shows that there is a large unprotected space between these companies. In the vicinity of Balderston street, is about the centre of this space, and this would be an excellent location for an engine company. There has been no increase in the number of engine companies since 1875.

PERMANENT MEMBERS.

An ordinance was passed by the City Council on April 23, giving authority to drop call members in the

companies, and use the amount of their salaries in paying permanent members. This has been done in Nos. 1, 2, 3, 4 and 5 Engine Companies, by dropping a call member in Nos. 8, 10, 11 and 13 Engine Companies and No. 3 Hook and Ladder Company, and using their salaries in making the permanent members in the above mentioned companies, as they being centrally located have the greatest amount of labor to perform. In Nos. 6, 7, 9 and 12 Engine Companies, and in Nos. 1, 3 and 4 Hook and Ladder Companies, one of the call members has been dropped, and a permanent member added, and we find that adds greatly to the efficiency of these companies. Nos. 8, 10, 11 and 13 Engine Companies have only the three permanent members. Another should be created as soon as possible for these companies, as it will only entail an additional sixteen hundred dollars, four hundred to each company, to make this desired improvement. To show the necessity of making it, I will mention one case that occurred. A fire occurred on the evening of November 19th, at 4.50 P.M., in Male and Female Primary School No. 15, on Republican street, near Lexington. Nos. 8, 10 and 13 Engine Companies came on the ground with but the three permanent members, and had to depend on citizens for assistance to put the apparatus in service. I would also recommend that the captains of the companies should be made permanent members, as it is impossible to maintain proper discipline under the present system. The captains, being call members, are compelled to work at avocations for a livelihood, and during their absence they are compelled to rely on the reports they receive from the enginemen and tillermen in regard to what

transpires about the houses during their absence, and when a fire occurs, and the company arrives on the ground, if the captain is absent there is no one to direct their operations when going in service, which causes a delay and much confusion. The desirability of making permanent all the call members has for some time been recognized by practical firemen, the business men and underwriters of our city; the great interests involved demand a more thorough protection than can be had from our present relic of the old volunteer system. There is a time in the history of every growing city when its interests demand a more certain protection from fire hazards than a call department is prepared, from the nature of the case, to furnish. This time has come, in the judgment of those who are best capable of determining upon such matters in our city, and they claim that a permanent force should be established. No man of practical knowledge will claim that a force of men giving all their time to the service will not develop a greater degree of efficiency than those who are called upon to gain a livelihood in some other manner, and who only respond at the tap of the bell.

The only cities in the Union, with a population of over two hundred thousand inhabitants, that have call members, are New Orleans and San Francisco—all the others have full paid departments.

FIRES AND ALARMS.

It will be seen by the following statements that the number of fires and losses have increased over that of the preceding year; but as warehouses are being stored

with combustible material, and the number of manufacturing establishments are rapidly increasing, it will increase the number of fires and the losses. There have been a greater number of fires in large buildings in the centre of the city than ever occurred before since the organization of the department--two of them being in four-story warehouses, containing three thousand four hundred bales of cotton and other merchandise. There were 399 fires, of which 256 were box alarms and 143 were telephone or silent alarms. There were twelve second and five third alarms. The loss amounted to $561,520, of which amount $33,700 was caused by six fires. There were only seven fires that caused serious damage outside of the building where they originated, and the loss sustained by three of these was caused by scarcity of water in the localities where they occurred.

Jannary 3d.--Box No. 432--Time of first alarm 11:21 P.M.; second alarm 11:30 P.M., was caused by the burning of a large two-story brick and frame building, at the Mount Clare works of the Baltimore and Ohio Railroad Company. The works occupy the area of ground extending from Poppleton to Carey streets, and from Pratt street south to McHenry street. The building was used as a carpenter and car building shop; it contained eighteen cars and a large quantity of lumber, and immediately adjoining it were immense piles of lumber and shops which caught fire several times, but did not sustain any serious damage. The fire was confined to the building where it originated. Seven engines and two trucks were in service; four engines could not get any water from the fire-plugs where they stopped. At the time of the fire a four-inch pipe sup-

plied this section with water; a ten-inch main has been laid since. Damage $40,000.00.

March 29th.—Box 65—Time of first alarm, 10:10 A.M.; time second alarm 10:25 A.M., was caused by the burning of a three-story brick building, corner Winder and Race streets, occupied by Alonzo L. Thompson, manufacturer of chemicals. The building was surrounded by four frame buildings, one of which was burned. Six engines and two trucks were in service. Damage $28,892.00.

April 2d.—Box 52—Time of first alarm, 8:23 P.M.; second alarm, 8:28 P.M., was caused by the burning of several piles of lumber, and the drying shed, in the lumber yard of Wm. S. Taylor & Co., running through from Light to Charles street, near Barre, and adjoining Marburg's Tobacco Works. Four engines and two trucks were in service. Damage $3,259.00.

April 11th.—Box 181—Time first alarm, 9:20 P.M. Nos. 3 and 6 Engine companies called at 9:57 P.M.; was caused by the burning of Gardner's (No. 2) grain elevator, situated at the lower end of Clinton street, Canton, being partly in the city and partly in Baltimore county. It was a frame structure three hundred feet long, and contained some machinery and a quantity of grain. It was surrounded on three sides by water. Two large vessels which were loading with grain were partly burned before they could be pulled out. Five engines and two trucks of the city department, five engines of the county department (chemicals,) and the tug boats Convoy and Transfer, of the Baltimore and Ohio Railroad fire brigade, from Locust Point, were in service. These boats rendered valuable service by pull-

ing out the vessels lying at the wharf. If we had not had their assistance the damage to the vessels would have been much greater. Damage $97,000.00, of which $50,000.00 was in Baltimore county and $47,000.00 in the city.

May 19th.—Box 521—Time of first alarm 6.08 A. M.; second alarm 6.11 A. M., and third alarm 6.29 A. M., was caused by the burning of a five-story brick building, No. 157 West Pratt street, occupied by Lerch Brothers, manufacturers of saddlery, harness, and horse collars; they also occupied the fifth story of the adjoining building. The fire originated on the third floor, and burned up through the fourth and fifth stories, where a large quantity of straw used in collar making was stored. Eight engines and two trucks were in service. Damage $12,742.95. The fire was confined to the building where it originated.

August 8th.—Box 421—Time of first alarm 2.44 P. M.; second alarm 2.48 P. M.; third alarm 3.03 P. M., was caused by the burning of a large three-story brick building on the corner of Lexington and Arch streets, running back to Penn alley. The front of the building was 70 feet and depth 120 feet. It was occupied by Matthai, Ingram & Co., manufacturers of tinware. Eleven houses on Penn alley, and four on Lexington street, having shingle roofs, caught fire from the burning brands that the wind carried on them, and were damaged by having the roofs burned off. Nine engines and three trucks were in service. Damage $65,538.81.

November 12th.—Box 13—Time of first alarm 7.42 P.M.; second alarm 7.46 P.M., was caused by the burning of a two-story brick building, situated on the north

end of the block bounded by West Falls avenue, Lombard and Concord streets. Occupied by Assendorf & Dreyer as a wooden box and trunk factory. The fire was confined to the centre of the building. Seven engines and two trucks were in service. Damage 8,600.

November 16th.—Box 13—Time of first alarm 5.35 P. M.; second alarm 5.40 P. M.; was caused by the burning of a six-story brick building, Nos. 22, 24 and 26 Concord street, and running through to Pratt street. Occupied by Charles Hollander & Sons as a furniture factory. The fire was confined to the front part of the fifth and sixth stories. Five engines and two trucks were in service. Damage $4,200.

November 28th.—Box 123—Time of first alarm 1.51 P. M.; second alarm 1.57 P. M.; third alarm 2.02 P. M., was caused by the burning of a four-story double brick building, Nos. 38 and 40 West Lombard street, corner of Frederick. It was occupied by S. Clapham Smith and Alexander G. Carey, cotton brokers, as a storage warehouse, and contained sixteen hundred bales of cotton, a large quantity of tobacco in hogsheads, and other merchandise. The adjoining building, No. 36, was damaged on the roof. Eleven engines and three trucks were in service. Damage $60,000.

December 19th.—Box 134—Time of first alarm, 9.20 A. M.; second alarm, 9.25 A. M.; third alarm 9.28 A. M., was caused by the burning of a four-story brick building No. 1 Union Dock. The fire spread through the communicating arches to Nos. 2 and 3, and did considerable damage to the cotton stored in the rear part of the third and fourth stories, and burned off part of the roof. The warehouse where the fire commenced was

burned out in the upper stories, and the goods badly damaged that were stored in it. The buildings were occupied by the Baltimore Warehouse Company and used as a general storage for merchandise. It contained 3,000 bales of cotton and a large quantity of canned goods, and other merchandise. The whole department was in service. Damage $76,400. During the progress of the fire the wall on the south side fell and badly mashed one of the Hayes trucks, and injured three of the members.

December 20th.—Time of first alarm 3.06 A. M.; second alarm 3.20 A. M.; third alarm 3.50 A. M., was caused by the burning of the grain elevators and flour mill of Tyson & Corner, on Hughes street, near Covington—a two-story brick and frame building, fronting two hundred feet on Hughes street and running back to the water. It contained thirty thousand bushels of grain and some valuable machinery. There were two two-story brick warehouses, one on each side of the mill, used for the storage of grain. One was slightly damaged on the roof, and the other had the elevator burned off. Eight engines and two trucks were in service. Damage $40,000.

December 21st.—Box 415—Time of first alarm 10.26 P. M.; second alarm 10.31 P. M., was caused by the burning of a four-story brick building, northwest corner of Eutaw and German streets, occupied by Richard Sauer & Co., manufacturers of show cases. The fire was confined to the rear part of the third and fourth floors where it originated. The fourth floor contained a large quantity of lumber and moulding. Eight engines and three trucks were in service. Damage $8,300.

FIRES OUTSIDE OF THE CITY WHERE THE DEPARTMENT WAS CALLED ON TO RENDER ASSISTANCE.

April 10th.—Telegraph dispatch was received at 12.15 A. M. from Westminster, Md., stating that a large fire was raging, and asking for assistance, as it was beyond their control. No. 8 Engine Company of the city department, and Nos. 3 and 4 Chemical engines, of the county department, were sent by the Western Maryland Railroad to their aid. They returned at 11 o'clock A.M. Eighteen buildings were destroyed and two men burned to death. Damage $75,000.00.

April 29th.—Telephone alarm received from Baltimore county fire department at six o'clock A. M., asking for aid to extinguish a fire that was burning at Reese & Bro.'s iron works. No. 11 Engine Company was sent to their assistance and was in service five hours.

June 11th.—Telegraph dispatch received at 6.10 P.M. from the Mayor of Havre-de-Grace, Md., asking for aid, as a large fire was raging in the planing mills, sash factory and lumber yards, and that the lower part of the town was in danger. No. 11 Engine Company and one of the hose carriages of No. 5 Engine Company were sent by the Philadelphia and Wilmington Railroad to their assistance, and were in service fourteen hours. Damage $100,000.00. They returned at 12 o'clock on June 12th.

September 5th.—Box 48—Time 11.35 P. M. This alarm was sent in to call on the department for aid, as the Saint Joseph Passionists' Monastery, on the Frederick road, three and a-half miles from the city, was burning. Nos. 8 and 10 Engine Companies and No. 4 Hook and Ladder Company were sent to their assist-

ance, and were in service seven hours. The apparatus of the county and city departments by their combined efforts succeeded in saving the church, although the steeple was burned off; the Monastery was destroyed. Damage $60,000. They returned at 7 o'clock A. M. on September 6th.

October 22d.—Telegraph dispatch was received at 5.20 A. M. from the Mayor of Annapolis, Md., asking for aid, as a fire was raging and several lives had been lost. No. 10 Engine Company was sent to their assistance by the Baltimore and Ohio and Annapolis and Elkridge Railroad, and was in service six hours. Ten houses were destroyed and a man and woman killed. Damage $50,000.

October 26th.—Telegraph dispatch was received at 9.20 P. M. from the officials of the Baltimore and Ohio Railroad, stating that the works of the Viaduct Electrical Company, at the Relay House, nine miles from the city, was burning. No. 2 Engine Company was sent and was in service five hours. The building was a four-story brick and frame; it was formerly used as a flour mill. Damage $40,000. The company returned at 4 o'clock A. M. October 27th.

WATER SUPPLY.

During the past year water mains have been laid and fire plugs put down in some of the localities where I mentioned the water supply as being deficient in last year's report; and still there is an absolute necessity for a largely increased number of fire plugs, as there are sections of the city recently built up, where the fire plugs are great distances apart. At the fire that

occurred on Boundary avenue, on the morning of December 10th, three engines were in service, and one of them had out one thousand feet of hose; and at the fire that occurred on the corner of Lexington and Arch streets, on August 8th, nine engines were in service, and four of them had out from twelve to sixteen hundred feet of hose, and some of the engines that were at plugs near the fire could get no water on account of the small size of the water mains, and this is near the centre of the city.

Nineteen new plugs, at new locations, were erected last year, making the total number nine hundred and fifteen, and they are scattered over sixteen square miles of territory. There should be, at least, double that number.

In Baltimore City Code, page 1143, section 53, article 40, Fire Plugs, reads as follows:

"The water board is hereby directed to have at least thirty-five plugs put down annually hereafter, and placed at such points or places as in their judgment will best serve for the extinguishment of fires, and they shall place at least one fire plug to the front or face of each square of ground or buildings where water pipes may be laid down."

Article 41.—The sum of five thousand dollars is hereby appropriated annually to pay the expenses of erecting fire plugs, and the Register is hereby directed, with the approbation of the Mayor, to pay such sums to the order of the Water Board not exceeding the annual appropriations for that purpose.

The provisions of this ordinance have not been carried out since 1876. If it had been, there would have

been erected one hundred and eighty-five plugs at new locations during the past six years. There should be a larger pipe laid on Hughes street, so as to afford better protection to the property, which is largely composed of large manufacturing establishments and packing-houses. A fire occurred on the morning of December 20, at Tyson's mill, on Hughes street. The two engines having the only available plugs, could not get enough of water to do any service, and as the wharves in this locality are in very bad condition, it is almost impossible for the engines to get to the water; and at the time of the fire there was a gale from the northwest, which made the tide so low that three pieces of sucking-sleeve were required on each engine to reach the water, which caused a good deal of delay in getting the apparatus in service, and gave the fire time to spread through the building, causing a heavy damage.

HOISTWAYS TO BE ENCLOSED.

An ordinance was passed to protect the lives of policemen and firemen, as they are frequently required to go into buildings in the smoke and darkness. But it affords no protection, as, by the way it is worded, it cannot be enforced. It requires the Inspector of Buildings to visit all places where there are hoistways, and to notify the owner or lessee of the building, in writing, to enclose them properly. They are frequently found open, with no guard of any kind to prevent any one from falling into, and in many buildings there are dangerous openings in the floors that are not hoistways, and do not come under the provisions of this ordinance.

I would recommend that the City Council should be requested to alter the wording of the ordinance so that it will include all openings in floors, and compelling railings to be put around stairways, that the Police Commissioners be requested to have all warehouses examined, and, where it is found necessary, for the notices to be served by the police.

INFLAMMABLE OILS.

I desire to call your attention to the necessity of the passage of an ordinance by the City Council to prevent the storage of inflammable oils in large quantities in the business sections of the city, as there are several places where, if a fire should occur, the burning oil would run in the gutters for squares, setting fire to everything in its course, until it burnt itself out. At fires of this kind the department is powerless, for the more water thrown upon it the further the fire extends—the burning oil being carried by the water.

FIRE ESCAPES, PROTECTION TO LIFE.

A law was passed by the State Legislature at the last session for the better protection of life from danger by fire. It prescribes that all buildings over two stories in height, and where more than twenty-five (25) people are employed, shall be provided with means of escape in case of fire, and compelling the owner or owners, trustees or lessees, to put them up. This law will do very well to protect the people in large manufacturing establishments; but what protection does it afford to the employees in small factories that are generally in

the top stories of high buildings, on account of cheap rents? Why a small factory that employs twenty persons in a sixth-story room should be exempt from the duty of providing a fire-escape, when a factory that employs twenty-five must provide one, is not easy to see. The same protection should be given to all. The majority of people employed in these places are genally women and children; and fires, when they occur, often originate on the lower floors.

I would recommend that the City Council be requested to pass an ordinance to compel the owner or owners, trustees or lessees of buildings over two stories in height, to have scuttles in the roofs, with convenient and suitable stationary stairways or ladders leading to the same, so as to afford a convenient access to the roof in case of fire; and on all buildings that are isolated or higher or lower than the adjoining buildings, shall have an outside fire-escape, made of iron, with balconies and ladders, or pipes from the top stories to within ten feet of the ground; the iron fire-escapes to be kept well painted, and making it a severe penalty for any one to remove the stairways or ladders leading to the scuttles, or to have the covering on the scuttles locked when any of the employees are in the building.

ORDINANCES PASSED.

Ordinance passed by the City Council on April 23d, to change the title of the commanders of the companies from foreman to captain; and to change the dividing line of the fire districts from Calvert street, where it was located twenty-five years ago, when the

present department was organized, as follows: Eastern District to comprise all that part of the city lying east of the centre of Charles street, from the north boundary to Lee street, and down Lee street to the water line. And the Western District to comprise all that part of the city lying west of the centre of Charles street, from the north boundary to the south side of Lee street, down Lee street to the water front, and along the water front to the western boundary. This change was made necessary by the growth of the city west, northwest and at Locust Point.

An ordinance was also passed at the same time appropriating sixteen hundred dollars ($1,600) to pension four disabled members of the department, namely, George Krager, of No. 8 Engine Company, blind; Ebenezer Smith, of No. 11 Engine Company, blind; and John Wernsing, of No. 6 Engine Company, arm paralyzed. Henry Heiderick, of No. 3 Hook and Ladder Company, sick (consumption), was pensioned, and died.

HARBOR BOAT.

The necessity of having some means of protecting the shipping in the harbor, and at the wharves, from damage by fire, becomes more urgent every year. Several fires have occurred during the past year where a boat, fitted up with a powerful pump and manned by a suitable crew, could have saved more than the expense of operating it for the next five years. A fire occurred on the morning of January 10th, at 12.50 A. M., foot of Chesapeake street, Canton, on the floating grain elevator *Domestic*, and, owing to the high wind

prevailing, the flames spread to the steam tugboat *Hattie Woods*, and another floating elevator. One of the burning elevators went adrift and floated over towards Locust Point, where a great amount of shipping was lying. It was brought back by the steamtug *Convoy*, belonging to the Baltimore and Ohio Railroad Company, which, with the steamtug *Transfer*, belonging to the same parties, went in service and rendered valuable aid. These boats are fitted up with powerful pumps, and kept to protect the property of the company.

Another fire occurred on the night of April 11th—the burning of Gardner's grain elevator at Canton. The elevator was surrounded on three sides by water. The large Italian barkentine *Christina Aquarone*, and the bark *Neptune*, were on fire, and these, with several other vessels that were lying at the wharf of the burning elevator, were towed out by the steam tugboats *Convoy* and *Transfer*, which again came to our assistance, and rendered valuable aid by towing out these vessels, and keeping two effective streams of water on the fire for several hours. When fires of the kind mentioned above occur, the apparatus of the department is of but little use, for when the boats are anchored out from the wharves we cannot reach them, and can do nothing to assist them. Other commercial cities, with extended water fronts, have steam tugboats fitted up for the extinguishment of fires, with large forcing pumps that are capable of throwing several large streams of water a great distance; and these boats are also useful to assist in putting out fires that occur near the wharves. We have a water front of ten miles, nearly all of which is utilized, being built up with docks and wharves, with

hundreds of steamboats and sailing vessels lying at them, and the wharves are covered with sheds and warehouses filled with merchandise, and it cannot be expected that the boats owned by private individuals or corporations will always come to our assistance, although they have been doing so heretofore. I would recommend that a large steam tugboat should be procured, and fitted up with the most improved forcing pump, to afford proper protection to the above-described property, or some provision should be made to pay so much per hour for the service rendered by these boats when their assistance is required at fires.

CASUALTIES.

No. 2 Engine Company.—Fireman Chas. Causey, run a nail in his foot at fire on Ridgely street, box 534, February 9th; off duty 8 days. Substitute John Mulligan, arm hurt by falling at a fire on Lexington street, box 421, August 8th; off duty 23 days. Fireman Henry Hammel, arm and side injured by upsetting of hose carriage when going to fire on Baltimore street, box 412, December 11th; off duty 25 days. Fireman Chas. Grund, hand and head badly burned at fire on Hughes street, December 20th, box 603; still off duty.

No. 3 Engine Company.—Houseman William Pasterfield, back injured by falling off fuel wagon at fire on Union Dock, box 134, December 19th; off duty 5 days. Fireman, George C. Hodges, hand cut by glass at fire on Smith's Wharf, box 123, March 4th; not off duty.

No. 4 Engine Company.—Fireman James Allen, left shoulder injured by falling at fire on Harlem avenue,

box 453, March 30th; off duty 15 days. Fireman Geo. W. Bentz, face cut by being thrown off the engine when going to fire on West Falls avenue, box 135, November 24th; not off duty. Fireman Ernest E. Schultze, back sprained at fire on Lombard street, box 123, November 28th; off duty 18 days.

No. 5 Engine Company.—Fireman Benjamin Price, left shoulder dislocated and right hand badly cut by falling off the hose carriage when going to fire on West Falls avenue, box 13, November 14th; still off duty.

No. 7 Engine Company.—Fireman Edward Sheets, head and foot cut by falling from a ladder at a fire in the rear of No. 34 Pleasant street, box 313, May 25th; off duty 28 days. Fireman John Gildea, ankle sprained at fire on Lombard street, box 123, November 28th; off duty 1 day.

No. 8 Engine Company.—Fireman Greenbury Chapman, leg injured at fire on Frederick road, Box 48, September 6th; off duty 19 days. Fireman Greenbury Chapman, head cut at fire on Lombard street, box 123, November 29th; off duty 8 days.

No. 10 Engine Company.—Fireman George W. Smith, back sprained at fire on Hughes street, box 613, December 20th; off duty 8 days.

No. 12 Engine Company.—Fireman Benj. T. Wirts, legs burnt at fire at Mount Clare Station, box 432, January 3d; off duly 17 days. Fireman Levin Broadwater, knee cap injured at fire on Jackson street, telephone alarm July 9th; off duty 3 days.

No. 13 Engine Company.—Hostler Edward McGeehan, small bone in right ankle broken by the horse falling, as he was riding in the lead of the engine team when

returning from a fire on Madison street, box 324, January 13th; off duty 67 days. Substitute James Keyser, ankle sprained at fire on Lexington street, box 421, August 8th; off duty 3 days.

No. 1 Hook and Ladder Company.—Ladderman James Disney, foot mashed by the hind wheel of the truck when going to a fire on South Caroline street, box 153, January 14th; off duty 71 days. Ladderman John B. Keene, hand and leg cut by falling glass at fire on West Baltimore street, box 414, December 4th; off duty 12 days. Ladderman Frederick Oelman, foot cut at fire on Light street wharf, box 521, April 12th; off duty 34 days. Captain William Dunn, arm and shoulder injured by a falling wall at the fire on Union Dock, box 134, December 19; off duty 19 nays. Ladderman James Disney, ankle sprained at the fire on Union Dock, box 134, December 19th; off duty 17 days. Ladderman Joseph V. Dougherty was severely injured, having had his face and head cut, hand and fingers mashed and body badly bruised by the wall falling and breaking the ladder he was on, at the fire on Union Dock, box 134, December 19th.

No. 3 Hook and Ladder Company.—Ladderman Geo. Bosse, head cut by a falling shutter at fire on Smith's Dock, box 123, March 4th; off duty 22 days. Ladderman Jesse Vickers, hand cut with glass at fire on West Falls avenue, box 13, November 14th; off duty 6 days. Substitute George Little, side injured by falling through a hole in the roof of the building at the fire on West Falls avenue, box 13; off duty 31 days.

DEATHS.

Ladderman Henry Heiderick, a member of No. 3 Hook and Ladder Company, died of consumption on May 11th, after being off duty four months. He had been a member of the department for four years.

Ladderman Joseph V. Dougherty, a member of No. 1 Hook and Ladder Company, died on Tuesday, December 25th, from injuries received at the fire on Union Dock on December 19th. He died at his post in the discharge of his duty, a brave and gallant fireman, respected and beloved by the members of the department, with whom he had been connected for 15 years.

EXTRA LABOR IMPOSED ON THE DEPARTMENT.

In New York, Boston, Chicago, Philadelphia and other cities, the Fire Patrol (Salvage Corps) have in their equipment a steam fire engine, hose and other necessary tools, and men competent to handle them, and when large fires occur, and as soon as the department has it under control, they bring their apparatus and remain in service until the goods are removed and the fire extinguished. In this city they are not provided with apparatus for this purpose, but depend on the department, and it has occurred several times during the past year, that the apparatus had to be kept on the ground for several days and nights continuously after the fire was under control; for if it had been taken away, the smouldering fire might by breaking out again cause considerable damage additional to what had been done at first. This is always the case when fires occur in buildings where cotton is stored, and the storage of this

product has increased to a great extent. There are many warehouses, three, four and fives stories in height, frequently with doorways or arches leading from one to the other in the upper stories, with all the windows blocked up with bales of cotton piled against them to increase their capacity for storage. These fires will become more frequent and entail harder work on the department. At the fire which occurred on November 28th, corner of Lombard and Frederick streets, in a double four-story warehouse, containing sixteen hundred bales of cotton and a large quantity of tobacco in hogsheads, the working time of the engines was two hundred and thirty-one hours, and of the hook and ladder trucks sixty-five hours; and at the fire which occurred in the four-story communicating warehouses, Nos. 1, 2 and 3 Union Dock, on December 19, the working time of the engines was two hundred and thirty hours, and of the hook and ladder trucks sixty-four hours. This statement shows that the wear on the apparatus at these two fires was greater than was caused by the service at the balance of the fires that occurred during the year.

TELEGRAPH, TELEPHONE AND ELECTRIC LIGHT WIRES.

I would most earnestly call your attention to the great delay and trouble experienced in erecting ladders, when fires occur in the business part of the city, on account of the great number of wires that are strung on poles and over the house tops. There have been several fires where this delay has caused considerable loss of property. A fire occurred on June 11th, 1883, at the corner of Charles and German streets, and it was

impossible to get the ladder into the windows on German street, on account of the net work of wires. I ordered one of the poles to be cut down so as to throw the wires in towards the house; and what is of much more importance than the loss of property, is that the electric light wires are a source of danger to citizens and members of the department. A man and a horse on Monument street, near Davis, were prostrated by coming in contact with an electric light wire. At the fire which occurred on November 28th, at Lombard and Frederick streets, the extension ladder of one of the Hayes' Trucks resting against the electric light wires, the iron work became so charged with electricity that it could not be touched—and several fires have been caused by the wires coming in contact with wood work. And in case the fire-alarm wires were to cross or come in contract with an electric light wire where the insulating covering had worn off, the effect would be to ruin the machinery in the telegraph office at the City Hall, and the street boxes on that circuit; and if telephone wires were to come in contact with the electric light wires at a point where the insulation was worn off, it would be almost certain death to any one who attempted to use them. I will quote a few instances where fires and accidents have occurred in other cities. In New York on January 2d, an employee of an electric light company, was killed by receiving a current of electricity while handling the wires. He had climbed a pole for the purpose of removing the wires. This is an illustration of the danger that constantly threatens the firemen when they are brought in contact with these wires at fires.

I quote as follows from the New York papers :

"Some damage to the fire telegraph apparatus was recently done by the contact in Elizabeth street, of a fire-telegraph wire with the wire of an Electric Lighting Company, which friction, caused by vibration and oscillation, had denuded of insulating material, and a large and important district, in which is property *worth hundreds of millions of dollars*, was to a certain extent cut off from protection by the fire department. The fire wire was what is known at Fireman's Hall as the second circuit, which takes in the following alarm boxes :

Signal No. 217, Wooster street, near Spring street.
Signal No. 123, Broome and Mercer streets.
Signal No. 186, Elm street, near Broome street.
Signal No. 132, Bowery and Bayard street.
Signal No. 128, Franklin and Centre streets.
Signal No. 92, New Bowery and Chambers street.
Signal No. 58, Peck Slip and Pearl street.
Signal No. 38, Burling Slip, near Water street.
Signal No. 9, Front street, near Coenties Slip.
Signal No. 6, Battery Place, near Broadway.
Signal No. 61, Murray street, near West street.
Signal No. 121, Washington and North Moore streets.
Signal No. 181, Washington and Canal streets.
Signal No. 214, Hudson and Charlton streets.

"On the night in question, all their boxes reported automically at Fireman's Hall that they were out of order. Although it was suspected that an electric wire for illuminating purposes had caused the trouble, the point of contact was not discovered, because, although the machinery in boxes Nos. 186 and 217 was destroyed, box No. 123 was all right. In the boxes which were burned, both magnet coils were burned and fused, and the insulated fire wire which passed down the poles through gas-pipe was fused at Nos. 186 and 217. At station No. 121, although the box was all right, the wire above it in the gas-pipe was fused. Several days after-

ward the point of contact was discovered. The Electric Lighting wire had been drawn up so close to the fire wire, that the latter's friction on the insulating material had gradually exposed the core of the cable. At Firemen's Hall two ground switches on the marble switch-board burned blotches on the marble and on the brasswork of the "ground points," when the sparks they made were as bright a light as that in an ordinary electric street lamp. Had the operator on duty handled the switches on that circuit at the time, he would have been *killed* or *dangerously injured.*

"At a recent meeting of the National Association of Fire Engineers, held at Richmond, Va., it was resolved 'that there shall be placed upon the exterior of all buildings where electric wires are introduced, an absolute 'cut-off,' so that in case firemen are called by cause of fire to enter said buildings, the danger of *instant death* (the inevitable result of coming in contact with improperly insulated or broken wires), under very many situations, may be in a great measure avoided.'" The report further goes on to say:

"We are aware that electricians claim that no such danger exists if the wires are properly insulated; but we firmly believe that there is danger of firemen receiving a violent shock from contact with wires under certain circumstances.

"One great source of danger that has already been the cause of several small fires, in this and other cities, is the practice of running electric wires through our streets on poles with other wires, and over and on buildings where it is impossible to prevent contact with other wires.

"In one case a telephone instrument in a building was destroyed by its wire coming in contact with an electric wire on the street.

"In another case where the electric wire was fastened to a wooden cornice covered with tin, the tin became so heated that the wood beneath was ignited; and in an interview with a representative of the company owning

this wire, he stated that it was the heaviest coated insulated wire in use for street lights.

"A clerk in a Cincinnati store, in attempting to remove goods from a show-window, by means of a brass rod, accidentally touched an electric-light wire, and received a shock that threw him headlong through a plate-glass window to the pavement. He was badly injured.

"At a meeting of the New York Board of Fire Insurance Underwriters, at which the question of the danger of fire from electric wires was discussed, experts were called on to give their views. An accident took place at the office of a firm in Maiden Lane, which alarmed underwriters and caused an investigation. There is a telephone running from No. 8 to No. 14 Maiden Lane, the wire passing over the roofs of adjoining houses. The United States Electric Lighting Company recently ran one of their wires over the same roofs, and one day, by the breaking of a wooden support, the electric light wire fell upon the telephone wire. The result was the instant destruction of the telephone, the woodwork being burned up, and even the metal parts of the instrument blackened and melted. Fortunately, it was attached to a brick wall, and the only injury done to the building was to the plaster. But if, instead of a brick wall it had been attached to a wood partition, the building would probably have been set on fire."

The *Fireman's Journal* says: "The Commissioners of the New York Fire Department apprehend much danger from the electric light wires, which are stretching over so much of the city. A few nights ago the woodwork over the entrance of one of the theatres was fired by contact with a naked wire, permitted by a break in the insulator. Lead over the wood was melted by the electric current. The lights whose wire did this damage belonged to the theatre, and are not connected with the public lighting of the streets. The other day three alarm circuits were made useless, the magnets being destroyed and the relay magnets burned out in the telegraph office of the Fire Department Head-

quarters, by contact with the wires of an electric light company. The Fire Commissioners have passed a resolution which, after reciting these points, orders the Department's counsel to confer with the Corporation counsel relative to taking legal measures to force the company to pay for the damage done, and prevent similar accidents from happening in the future. If the insulation is thus imperfect while *new*, constant repetition of such accidents when it becomes *old* and *worn out* is, the Fire officials say, to be feared. The electric wires chiefly trouble the Department when they have to be cut away from the tops of houses to permit the firemen to work at fires. They have to be cut with an instrument having a wooden handle. If the handle is wet it becomes a conductor, and the fireman holding it stands in danger of receiving a *fatal* shock. That no fatal accident of the sort has happened as yet, is due to the great care which is exercised by the firemen, and which, sooner or later, in an emergency will not be exercised."

New York, Chicago, and several other cities have passed ordinances compelling the wires to be placed under ground by a certain time.

TABLE

Showing Number of Alarms Monthly for the Year 1883.

Month.	Box.	Telephone and Silent.	Total.
January	21	14	35
February	17	8	25
March	21	10	31
April	16	10	26
May	26	12	38
June	14	10	24
July	14	14	28
August	29	14	43
September	29	12	41
October	19	10	29
November	18	17	35
December	32	12	44
	256	143	399

TABLE

Showing Number of Fires on each Day of the Week for the Year 1883.

Sunday	30
Monday	44
Tuesday	22
Wednesday	42
Thursday	40
Friday	40
Saturday	40

TABLE

Showing Working Time of the Engines and Service of the Hook and Ladder Trucks at Fires.

	Hours.	Minutes.
No. 1 Engine Co. in service.....	66	30
" 2 " "	112	30
" 3 " "	70	2
" 4 " "	67	15
" 5 " "	57	5
" 6 " "	68	20
" 7 " "	58	..
" 8 " "	52	20
" 9 " "	66	..
" 10 " "	59	15
" 11 " "	78	30
" 12 " "	54	30
" 13 " "	65	35
" 1 Hook and Ladder Co. in service.	90	15
" 2 " " " ..	223	..
" 3 " " " ..	242	..
" 4 " " " ..	200	..

TABLE

Showing the Number of Times Companies have responded to Fires, and transferred to the Houses of other Companies; Number of Feet Hose laid at Fires, and Number of Ladders used at Fires.

Companies.	No. of Times responded to Fires.	No. of Times transfer'd on Alarms.	No. of Feet Hose laid at Fires.	No. of Ladders used at Fires.
No. 1 Engine Company.	95	.....	27,200	....
" 2 "	112	1	37,100	....
" 3 "	93	2	23,510	....
" 4 "	96	1	18,000	....
" 5 "	61	34	20,500	....
" 6 "	80	1	26,200	....
" 7 "	87	18	22,100	....
" 8 "	75	30	17,200	....
" 9 "	58	39	13,850	....
" 10 "	84	22	17,900	....
" 11 "	40	37	10,650	....
" 12 "	56	54	25,700	....
" 13 "	61	9	13,550	....
" 1 Hook and Ladder Co..	93	.....	.....	173
" 2 " " ..	130	6	.....	241
" 3 " " ..	50	91	.....	108
" 4 " " ..	76	85	.....	90
			*273,400	612

* Being over 51 miles.

TABLE

Showing Losses Monthly, Year ending December 31, 1883.

Month.	Silent.	Box Fires.	Total.
January	$ 523 75	$56,471 14	$56,994 89
February	634 50	13,869 15	14,503 65
March	258 00	34,502 47	34,760 47
April	235 29	55,635 00	55,870 29
May	173 00	25,388 76	25,561 76
June	210 00	15,973 10	16,183 10
July	350 00	4,189 25	4,539 25
August	184 00	71,826 90	72,010 90
September	510 00	11,736 17	12,246 17
October	160 00	4,354 06	4,514 06
November	840 00	84,600 00	85,440 00
December	1,680 00	177,315 46	178,995 46
			$561,620 00

TABLE

Showing Number of Box Alarms by District for Year 1883.

Month	E. of Charles st.	W. of Charles st.	Total.
January	12	9	21
February	5	12	17
March	10	11	21
April	8	8	16
May	14	12	26
June	6	8	14
July	7	7	14
August	8	21	29
September	15	14	29
October	8	11	19
November	9	9	18
December	8	24	32
	110	146	256

There were 110 alarms from boxes in the Eastern District, which comprises all that part of the city east of the centre of Charles street, from the north boundary to the centre of Lee street, and 146 alarms from boxes in the Western District, which comprises all that part of the city west of the centre of Charles street, from the north boundary to the centre of Lee street, down Lee street to the water front, and along the water line to the western boundary.

FIRE EXTINGUISHERS.

During the past twelve months, the fire extinguishers have been used eight hundred and seventy-eight times, as follows: Five-gallon extinguishers four hundred and twenty-seven times; eight-gallon extinguishers one hundred and eight times, and fifteen-gallon extinguishers three hundred and forty-five times; and have discharged eight thousand one hundred and seventy-six gallons of solution sulphuric acid and bi-carbonate of soda (generating carbonic acid gas), and one hundred and seventy eight fires extinguished in their incipiency by using them.

I respectfully tender to the officers and members of the department my appreciation of the zeal and efficiency displayed by them on all occasions.

Respectfully submitted,

JOHN M. HENNICK,
Chief Engineer.

FIRE RECORD.

RECORD OF FIRES AND ALARMS FOR THE YEAR ENDING DECEMBER 31, 1883.

DATE.	BOX.	HOUR A.M.	HOUR P.M.	LOCALITY.	OCCUPANT.	HOW OCCUPIED.	ENGINES IN SERVICE.	H. & L. IN SERVICE.	STYLE OF BUILDINGS.	REMARKS.
January, Monday	1	462	.....	9.04	896 W. Pratt street.	Laurence Loose.	Dwelling.	.....	.....	Three-story brick.	Loss $35; recall 9.20 p.m.; in service, extinguishers of Engine Companies 8 and 13; caused by Christmas tree taking fire from candles.
Wedn'y	3	24	.....	8.53	Hillen street, between High and Exeter.	Western Md. R. R. Co.	Passenger Depot.	4, 6	1	Three-story brick.	Loss $463; recall 9.48 p.m.; wood work taking fire from furnace.
"	3	12	.....	11.17	65 W. Baltimore st.	J. Antoni.	Confectionery Store.	.....	.....	Five-story brick.	Loss $230; recall 11.27 p.m.; hot ashes in a wooden box.
"	3	432	.....	11.20	Block bounded by Poppleton, Pratt, Carey and Columbia avenue.	B. & O. R. R. Co., Mt. Clare Station.	Carpenter and Car Shops.	1, 2, 4, 5, 7, 8, 10, 12, 13	2, 4	One-story brick.	Loss $40,000; recall 9 a.m., 4th; cause of fire unknown; Engine Companies Nos. 3, 6, 7 and 10 had to be sent home, as there was not water enough in the small pipes to supply their en-

										gines; second alarm 11.30 p.m.
Friday	5	151	4.05	.....	219 E. Baltimore st.	A. J. Stevenson.	Notion Store and Dwelling	.....	..... Three-story brick.	Loss $90; recall 4.22 a.m.; defective flue setting fire to clothing in a cupboard; extinguishers No. 3 Hook and Ladder and No. 3 Engine Company in service.
Saturday	6	321	10.18	.....	177 Franklin street.	Mrs. Mary Jones.	Confectionery and Dwelling.	.....	..... Three-story brick.	Loss $51.50; recall 10.42 a.m.; defective flue setting fire to wood work; extinguishers No. 4 Hook and Ladder Company in service.
Sunday	7	171	.....	5.38	163 Collington ave.	Geo. Isenberg, Jr.	Dwelling.	.....	..... Three-story brick.	Loss none; recall 5.51 p.m.; explosion of a coal-oil lamp; extinguishers No. 11 Engine Company and No. 3 Hook and Ladder Company in service.
Monday	8	413	2.13	.....	18 McClellan's alley.	R. Lawson & Sons.	Harness and Trunk Manufacturers.	1, 2, 4, 6	1, 2, Five-story brick.	Loss $4,148.58; recall 4.29 a.m.; wooden joists running into a flue.
"	8	62	.....	9.20	17 and 19 Weyler st.	E. Snelesburg & Co.	Dry Goods and Cloak Store.	.....	..... Four-story brick.	Loss $370; recall 9.30 p.m.; goods in a show window taking fire from a gas jet.

Record of Fires and Alarms for the year ending December 31, 1883.

Date.	Box.	Hour A.M.	Hour P.M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
Tuesday	9	34	1.18	.....	23 Read street.	Mrs. A. E. Evans.	Dwelling.	.....	.....	Four-story brick.	Loss $31.78; recall 1.49 a.m.; defective flue setting fire to wood work; extinguishers of No. 4 Hook and Ladder Company.
"	9	16	.....	9.48	376 E. Pratt street.	Michael Shriver.	Grocery and Dwelling.	.....	.....	Three-story brick.	Loss $200; recall 10.30 p.m.; upsetting of a coal-oil lamp; extinguishers 5 and 11 Engine Companies and 3 Hook and Ladder Company.
Wedn'y	10	18	12.50	.....	Denmead's wharf.	Walter S. Burton.	Elevator "Domestic," Barge "Shirley," Tug "H. Woods."	5, 11	3	.....	.....	Loss $8,400; recall 5.18 a.m.; furnace under boiler of the elevator set fire to wood work, thence to tug and barge.
Satur'y	13	32	4	.....	7.15 N. W. cor. Madison avenue and Preston street.	Southern Methodist Church.	.....	.....	.....	.....	.....	Loss $375; recall 8.07 p.m.; register in floor setting fire to wood work; fire went up the partition to the gallery;

											in service, extinguishers 7 and 8 Engine Companies and 4 Hook and Ladder Company.
Satur'y	13	513	12.46	.....	S. E. cor. Sharp and Pratt streets.	Rand Furniture Co. and others.	Furniture Factory.	2, 8, 10	1, 2	Four-story brick.	Loss $1,905.25; recall 2.28 a. m.; fire in rubbish room of shoe store on first floor; cause unknown.
Sunday	14	153	6.28	.....	194 South Caroline street.	Miss Hate Hogan.	Boarding House.	.....	.....	Two-story and attic.	Loss $165; recall 6.50 a. m.; falling of a candle among clothing in a wardrobe; extinguishers 5 and 11 Engines and 3 Hook and Ladder Company in service.
"	14	352	.....	3.12	121 Lanvale street.	Sunday-school.	Presbyterian Church.	.....	.....	Two-story brick.	Loss $25; recall 3.41 p. m.; overheated stove set fire to wood work.
Wedn'y	17	5	12.45	.....	Little Grant and Mercer streets.	A. Hahl & Co. T. J. Huggins.	Elichu App, Manufact'rs. Dealer in Iron and Steel.	.....	.....	Four-story brick.	Loss $60; recall 1.21 a. m.; sparks from forge lodging in a timber in ceiling; extinguishers 3 and 4 Engines and 1 and 2 Hook and Ladder Companies in service.
"	17	28	10.31	.....	Washington and Oliver streets.	Catherine Hillen.	Dwelling.	.....	.....	Three-story brick.	Loss $26; recall 10.43 a. m.; foul chimney set fire to wood work.

Record of Fires and Alarms for the year ending December 31, 1883..

Date.	Box.	Hour A. M.	Hour P. M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
Wedn'y 17	143	.....	11.16	117 S. Spring street.	Cath. Bockelman.	Dwelling.	.....	.....	Two-story brick.	Loss $60; recall 11.40 p. m.; overheated stovepipe running through floor; extinguishers 3 and 5 Engines and 3 Hook and Ladder Company used.
Sunday 28	161	.....	6.02	181 S. Broadway.	Joseph Villneer.	Tailor Store and Dwelling.	.....	.....	Three-story brick.	Loss $25; recall 6.28 p. m.; gas escaping from a meter taking fire from a candle; extinguishers 5 and 11 Engines and 3 Hook and Ladder Company.
Monday 29	17	.....	2.24	Essex street and Patterson Park ave.	J. Christ.	Drug Store and Dwelling.	.....	.....	Three-story brick.	Loss none; recall 2.40 p. m.; wood saturated with turpentine making a large blaze in the stove; extinguishers No. 11 Engine Company used.

February.										
Thursd'y	1	414	7.30	.....	101 German street.	S. L. Stern & Co.	Carpet Manufacturers.	.....	.....	Five-story brick.	Loss $65; recall 7.45 a. m.; lighted paper falling in coton yarn; extinguishers No. 1 Engine and 2 Hook and Ladder Companies.
Friday	2	461	10.20	.....	7 S. Vincent street.	Richard Schnapp.	Dwelling.	.....	.....	Two-story brick.	Loss $10; recall 10.35 a. m.; wooden partition caught fire from stovepipe; extinguishers No. 10 Engine and 2 Hook and Ladder Companies in service.
Tuesday	6	24	1.07	.....	143 Chesnut street.	W. G. James and others.	Dwelling.	.....	.....	Three-story brick.	Loss $175; recall 1.45 a. m.; hot ashes thrown in cellar; extinguishers No. 6 Engine and 1 Hook and Ladder Companies.
Wedn'y	7	413	2.10	.....	64 Lexington street.	Nathan Gutman.	Dry Goods and Millinery.	.....	.....	Four-story brick.	Loss $403; recall 2.35 a. m.; gas jet setting fire to blankets; extinguishers No. 2 Hook and Ladder Company used.
"	7	214	.....	8.37	77 N. Exeter street.	S. Rosenstein.	Dwelling.	.....	.....	Three-story brick.	Loss $43; recall 8.47 p. m.; wooden mantel taking fire from a stove; extinguishers No 6 Engine and No. 1 Hook

*

Record of Fires and Alarms for the year ending December 31, 1883.

Date.	Box.	Hour A. M.	Hour P. M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
										and Ladder Companies used.
Thurs'y	8	235	10.54	.....	Jefferson and Castle streets.	F. Cinch.	Grocery and Dwelling,	.....	.....	Three-story brick.	Loss $30; recall 11.11 a. m.; wood drying in an oven taking fire; extinguishers No. 9 Engine Company and 3 Hook and Ladder Company in service.
Friday	9	534	12.30	.....	51 Ridgely street.	Tribell & Bro.	Brush Makers and Dwelling.	2, 8, 10, 12	2	Three-story brick.	Loss $3,590; recall 1.50 a. m.; fire from pitch-pot setting fire to stock.
"	9	321	2.25	.....	186 Franklin street.	.....	Ear and Eye Hospital.	.....	.....	Four-story brick.	Loss $195; recall 2.41 a. m.; overheated stove setting fire to mantel; extinguishers No. 8 Engine Company and No. 4 Hook and Ladder Company.
"	9	31	.....	6.52	131 North street.	Tillie Stewart.	Board'g House and Restaurant.	.....	.....	Three-story brick.	Loss $195; recall 7.18 p. m.; gas jet setting fire to clothing; extinguishers Nos. 4

											and 6 Engine and No. 1 Hook and Ladder Companies.
Satur'y	10	42	.....	9.25	154 Lexington st.	E. L. Rosenbaum.	Millinery Goods.	1	1, 2	Four-story brick.	Loss $6,877.13; recall 10.40 p.m.; defective flue.
Sunday	11	42	.....	7.48	194 Lexington st.	F. G. Steinmitz.	House-furnishing Store and Dwelling.	.....	.....	Four-story brick.	Loss $20; recall 7.56 p.m.; clothing catching fire from stove; extinguishers No. 2 Hook and Ladder Company used.
Monday	12	416	6.54	.....	2 N. Greene street.	Haupt & Co.	Shoe Factory.	1	2	Four-story brick.	Loss $231.67; recall 7.12 a.m.; lighted match dropped among papers.
Tuesday	13	363	.....	12.14	.....	.....	.....	.....	.....	.....	Test alarm; recall 12.31 p.m.; given to visitors from York.
Thurs'y	22	523	6.57	.....	128 Conway street.	Mrs. Smith.	Dwelling.	.....	.....	Three-story brick.	Loss $54.50; recall 7.06 a.m.; lighted candle falling into a bed; extinguishers No. 2 Engine Company used.
"	22	523	.....	9.20	114 Barre street.	Siehler & Hebrach.	Table Manufactory.	2	2	Three-story brick.	Loss $40; recall 10.09 p.m.; sparks from furnace setting fire to shavings.
Satur'y	24	353	.....	2.32	167 John street.	G. M. Vaughn.	Dwelling.	.....	.....	Four-story brick.	Loss $45; recall 2.58 p.m.; children playing with matches; extinguishers 13 Engine and 4 Hook

Record of Fires and Alarms for the year ending December 31, 1883.

Date.	Box.	Hour A.M.	Hour P.M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
										and Ladder Companies used.
Tuesday 27	235	7.25	.....	Monument and Castle streets.	Kensei & Hohman	Slaughter House.	5, 9, 11	3	Three-story brick.	Loss $1,990; recall 9.55 a. m.; coal oil lantern upset and set fire to stable; a horse burnt to death.
March. Thurs'y 1	314	.....	5.40	148 N. Howard st.	T. C. Burton.	Dyer and Scourer.	7	2, 4	Four-story brick.	Loss $560; recall 6.08 p.m.; children playing with fire set fire to clothing.
Sunday 4	123	1.50	.....	75 Smith's wharf.	Jas. McCoy.	Ship Chandlery	1, 2 3, 4, 5, 6	1, 3	Four-story brick.	Loss $3,135.09; recall 4.07 a. m.; stove in office setting fire to wood work; ladderman George Bosse injured by shutter falling on his head.
Wedn'y 7	561	12.55	.....	Leadenhall street, south of Ostend.	Hy. Seim & Co.	Glass Manufacturers.	2	.....	Two-story frame.	Loss $10; recall 1.06 a. m.; gasoline leaking and taking fire from unknown source.

Wedn'y	7	613	.....	3.10	Hughes street, near Covington.	Baker Bros. & Co.	Glass Manufacturers.	2		2	Three-story brick	Loss $20; recall 3.34 p. m.; sparks from the furnace setting fire to ventilator.
Thurs'y	8	15	10.12	.....	116 S. Broadway.	Buffham & Bro.	Photograph Gallery.	.....	.....	.....	Four-story brick.	Loss $140.89; recall 10.40 a. m.; chemicals taking fire from a lamp; extinguishers 5 and 11 Engine Companies and 3 Hook and Ladder Company.
Sunday	11	363	.....	7.48	10 Harlem avenue.	Geo. H. M. Hall.	Dwelling.	.....	.....	.....	Three-story brick	Loss $100; recall 8.04 p. m.; window curtain blowing against a gas jet; extinguishers Nos. 8 and 13 Engine Companies.
Monday	12	123	11.28	.....	38 W. Pratt street.	S. P. Robins.	Restaurant and Dwelling.	.....	.....	.....	Four-story brick.	Loss $15; recall 11.50 a. m.; ceiling catching fire from stovepipe; extinguishers 3 and 6 Engine Companies and 1 Hook and Ladder Company.
Tues'y	13	161	10.15	.....	320 Aliceanna st.	Wm. Jacobs and others.	Shoe Store and Dwelling.	5, 11		3	Three st'y frame.	Loss $317.71; recall 11.30 a. m.; stove in third story set fire to roof.
Friday	16	3	.....	1.19	37 N. Holliday st.	Holmes Bros. & Co.	Silver Platers.	1, 4, 6		1, 2	Two-story brick and attic.	Loss $600; recall 2.06 p. m.; sparks from chimney falling on roof.

Date.	Box.	Hour A. M.	Hour P. M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
Friday 16	251	.....	7.52	Chew and Stirling streets.	M. T. Horner & Co.	Junk Dealers.	.....	.....	Two-story brick.	Loss none; recall 8.08 p. m.; grate falling from stove and setting fire to rags; extinguished by the watchman.
Satur'y 17	415	9.58	.....	Garrett alley, near Eutaw street.	Rogge & Koch.	Notions and Fancy Goods.	.....	.....	Two-story brick.	Loss $25; recall 10.13 a. m.; parties smoking dropped fire on a pile of shavings; extinguishers No. 1 Engine Comp'y and 2 Hook and Ladder Company.
Thurs'y 22	514	.....	9.37	315 W. Pratt street.	John Heisenberg.	Tailor Store and Dwelling.	.....	2	Three-st'y frame.	Loss $108; recall 9.47 p. m.; falling of a coal oil lamp.
Satur'y 24	36	11.18	.....	220 N. Fremont st.	J. L. Kiersted.	Dwelling.	....	.....	Three-story brick.	Loss $202; recall 11.33 a. m.; lighted cigar thrown into bureau drawer by a crazy man; extinguishers No. 13 Engine Company.
" 24	42	.....	6.44	Stall in Lexington Market.	Alex Brodie.	Poultry Dealer.	.....	.....	.....	Loss $5; recall 7.02 p. m.; falling of a

											gasoline lamp; nothing in service.
Monday	26	141	1.12	.....	Caboose Car, P. W. & B. R. R. Co., on President street.	.....	.....	3	.....	.....	Loss $275; recall 1.49 a. m.; wood work caught fire from stove.
Tuesday	27	21	3.26	.....	Gay, near Lexington Street.	Lewis Scheibe.	School.	.....	.....	Three-story brick.	Loss $5; recall 3.36 a. m.; hot ashes setting fire to boxes in the yard.
Thurs'y	29	52	3.43	.....	Welcome alley, rear of Lee street.	B. Thornton.	Stable.	2	2	Two-story frame.	Loss $126.78; recall 4.26 a. m.; parties smoking in stable; fire confined to 2d story.
"	29	21	9.36	.....	21 Saratoga street.	Harriet Butler and others.	Dwelling.	.....	.....	Two-story frame.	Loss $125; recall 10.11 a. m.; mattress catching fire from stove; confined to one room in 2d st'y; extinguishers 3, 4 and 6 Engine and 1 and 2 Hook and Ladder Companies.
"	29	65	10.10	.....	Race and Winder sts.	A. L. Thomsen	Chemical Factory.	1, 2, 7, 8, 10	2, 4	Three-story brick.	Loss $28,892; recall 4 p. m.; spontaneous combustion of sweepings in box near the hoistway; second alarm 10.26 a. m.
Friday	30	453	.....	7.56	174 Harlem avenue.	Gen. J. F. Cooper.	Dwelling.	.....	.....	Three-story brick.	Loss $12; recall 8.20 p. m.; cupboard in 3d story caught fire from defective flue;

Date.	Box.	Hour A.M.	Hour P.M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
										extinguishers, 8 and 13 Engine and 4 Hook and Ladder Companies.
Satur'y 31	512	.....	10.34	44 Hanover street, (in rear).	Herring & Jackson and others.	Candy Factory.	.....	.....	Three-story brick.	Loss $10; recall 10.53 p. m.; floor under furnace taking fire; extinguishers 2 and 4 Engine and 1 Hook and Ladder Companies.
April.										
Monday 2	52	.....	8.23	Centre of block between Barre and Conway and Light and Charles sts.	W S Taylor & Co.	Lumber Yard.	1, 2, 10	1, 2	....	Loss $3,259; recall 12.15 a. m. 3d; fire began in a two-st'y frame building used for choice lumber.
Thurs'y 5	3	.....	2.14	46 N. Holliday street	Baltimore Non-corrosive Bag Factory.	....	1, 2, 3, 4, 6	1, 2	Three-story brick.	Loss $1,560; recall 3.22 p. m.; bags saturated with a preparation of gasoline oil catching fire from a stove.
Friday 6	41	.....	11.54	Charles and Fayette streets.	R. Courtney & Bro and others.	Grocery and Liquors, Hat Factory, &c.	1, 2, 4, 6	1, 2	Four-story brick.	Loss $4,558; recall 2.18 a. m. 7th; furnace in hat factory

											setting fire to wood work; burned up through the fourth floor and roof.
Monday	9	121	10.21	.....	28 South street.	T. R. Turner and others.	Offices and Paint Shop.	4	.....	Three-story brick.	Loss $119.85; recall 11 a. m.; sparks from chimney set fire to roof; extinguishers 3, 4 and 6 Engine and 1 and 2 Hook and Ladder Companies.
Wedn'y	11	181	.....	9.18	Canton.	Canton Company.	Grain Elevator.	3, 5, 6, 9, 11	3	.....	Loss $37,000 in city, $60,000 in county; recall 11.25 a. m., 12th; wood work caught fire from boilers; Engines Nos. 3 and 6 called at 9.57 p. m.
Tuns'y	12	521	11.56	.....	124 and 126 Light street.	Chas. Hamilton. Chas. Demitz.	Restaurant. Cigar Store and Factory.	2, 4	1, 2	Three-story brick.	Loss $596.85; recall 1.29 p. m.; roof burned off; one roof covered both lofts.
Satur'y	14	212	4.45	.....	34 W. Baltimore st.	J. Stuckert.	Cigar Store and Dwelling.	.....	.....	Four-story brick.	Loss $194.60; recall 5.10 a. m.; stove-pipe setting fire to timbers; extinguishers 4 and 6 Engine and 1 Hook and Ladder Companies.
Monday	16	353	8.28	.....	Mt. Royal Hill, near Boundary avenue, (Baltimore Co.)	Edw. Kane.	Dwelling.	13	4	Two-story frame.	Loss $150; recall 8.59 a. m.; defective flue.

**

Date.	Box.	Hour A. M.	Hour P. M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
Monday 16	516	.....	6.51	Bayard street, near Russell.	Swindell & Sons.	Glass Factory.	.....	.....	Brick shed.	Loss $20; recall 7.15 p. m.; heat from the furnace burnt a small place in the roof; extinguishers No. 10 Engine Company.
Tuesd'y 17	154	10.11	.....	306 S. Caroline st.	J. H. Thiemeyer & Co.	Steam Box Factory.	5	3	Three-story brick.	Loss none; recall 10.54 a. m.; flue blew out of the boiler and set fire to shavings around it.
Wedn'y 18	241	5.43	.....	Holliday, near Centre street.	M. Crichton & Co.	Distillery.	3, 4, 6, 7	1, 4	Three-story brick.	Loss $1,969.22; recall 7.30 a. m.; fumes from the alcohol still catching fire from a gas jet.
Friday 20	54	7.26	.....	Hill st., near Sharp.	Littleton Jones.	Dwelling,	.....	.....	Two-story frame.	Loss $60; recall 7.50 a. m.; soot from burn'g chimney setting fire to floor and joist; extinguishers No. 2 Engine Company.
Monday 23	352	7.37	.....	352 Park avenue.	C. D. Denny.	Dwelling.	.....	.....	Three-story brick.	Loss $60; recall 8.04 a. m.; foul chimney;

											exting'hers 13 Engine Company and 2 Hook and Ladder Company.
Wed'sd'y	25	7	.....	5.56	Clement street, near Covington.	J. Rittenhouse.	Terra Cotta Pipe Factory.	.....	.....	Two-story frame.	Loss $20; recall 6.21 p. m.; roof caught fire from kiln; extinguishers No. 12 Engine Company.
Friday	27	4	3.46	.....	33 S. Calvert street.	Aiken & Co.	Willow Ware. &c.	1, 2, 3, 4, 6	1, 2	Five-story brick.	Loss $5,858.39; recall 6.47 a. m.; broom straw taking fire in sulphur box on 4th floor; burned thro' to the roof.
"	27	4	23	8.38	.....	68, 70 and 72 Raborg street.	Malinda Dolson and others.	Dwellings.	1	2	Three-story brick	Loss $375; recall 9.20 a. m.; sparks from chimney setting fire to roof.
May. Wed'sd'y	3	3	12	.....	7.45	50 Centre Market Space.	Mrs. K. Snyder.	Dwelling.	.....	.....	Three-story brick	Loss $10; recall 7.57 p. m.; explosion of a coal-oil lamp; a woman was fatally burned; extinguishers No. 1 Hook and Ladder Company.
Saturd'y	3	7	1.08	.....	Caroline street and Eastern avenue.	Heise, Baras & Co.	Planing Mill. Lumber Yard. &c.	.....	.....	One-story frame.	Loss $10; recall 1.30 a. m.; sparks from stack fall'g on roof; extinguishers No. 3 Hook and Ladder Company.
Sunday	6	8	2.07	.....	Mount and Lorman streets.	John Tucker.	Dwelling.	.....	.....	Three-story brick	Loss $20; recall 2.57 a.m.; defective flue;

Date.	Box.	Hour A.M.	Hour P.M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
										extinguishers No. 13 Engine and 4 Hook and Ladder Company.
Monday 7	173	.....	8.26	49 and 51 Burk street (in rear).	A. Gracier and A. Nelson.	Stables.	11	3	One-story frame.	Loss $150; recall 8.57 p. m.; cause unknown.
Thurs'y 10	35	3.08	.....	138 W. Madison st.	J. F. Adams.	Dwelling and School.	7, 8, 13	4	Three-story brick.	Loss $4,517.21; recall 5.47 a. m.; caught from furnace on first floor in rear: Mr. J. F. Adams, an old gentleman who was supposed to be dying of disease, was suffocated by the smoke; an old colored woman was burned to death, and another colored woman was badly injured by jumping from a window.
Friday 11	153	11.12	.....	176 Eastern avenue.	G. Lewis and France.	Restaurant and Dwelling.	....	.....	Three-story brick.	Loss none; recall 11.25 a. m.; fat on the stove taking fire.

Friday	11	314	.....	11.24	59 and 61 Mulberry street, (in rear.)	John Martin.	Stables.	1, 7, 8, 13	2, 4	Three-story brick.	Loss $575; recall 1.38 a. m., 12th; cause unknown.
Satur'y	12	561	11.20	.....	Leadenhall and Ostend streets.	Hy. Seim & Co.	Glass Manufacturers.	....	.....	One-story frame.	Loss $10; recall 11.34 a. m.; roof caught from smoke stack; extinguishers No. 12 Engine Company.
"	12	28	.....	5.08	Bekair avenue.	George Bauernschmidt.	Brewery.	.....	.....	Five-story brick.	Loss $75; recall 5.30 p. m.; sparks blown into window of top story on a pile of bags; extinguishers 6 and 9 Engine and 3 Hook and Ladder Companies.
Sunday	13	215	4.17	.....	44 East street.	H. Harri[illegible].	Dwelling.	....	.....	Three-story brick.	Loss $45; recall 4.42 a. m.; children playing with matches; part of roof burned off; extinguishers 3 and 6 Engine and 1 Hook and Ladder Companies.
"	13	561	.....	7.33	Leadenhall and Ostend streets.	Hy. Seim & Co.	Glass Manufacturers.	2, 10, 12	2	Two-story frame.	Loss $20; recall 8.29 p. m.; sparks from a locomotive setting fire to frame building, which was about one-third destroyed.
Tuesday	15	151	11.58	.....	Baltimore and Caroline streets.	Nathan Swift.	Grocery and Dwelling.	.....	.....	Three-story brick.	Loss $40; recall 12.11 p.m.; gasoline stove upset; exting'hers 3 and 5 Engine Cos.

Record of Fires and Alarms for the year ending December 31, 1883.

DATE.	BOX.	Hour A. M.	Hour P. M.	LOCALITY.	OCCUPANT.	HOW OCCUPIED.	ENGINES IN SERVICE.	H. & L. IN SERVICE.	STYLE OF BUILDINGS.	REMARKS.
Friday	18	516	.....	1.06 Ranstead's wharf.	J. Biemiller & Co.	Ice House.	10	2	Three-st'y frame.	Loss $100; recall 1.50 p. m.; sparks from smoke stack of hoisting engine setting fire to roof.
Satur'y	19	5321	6.08	..... 157 W. Pratt st.	Lerch Bros.	Harness Makers.	1, 2, 3, 4, 6, 7, 9, 10, 12.	1, 2, 4	Five-story brick.	Loss $12,742.95; recall 10.27 a. m.; the top floor of 159 was also occupied by Lerch Bros.; cause of fire unknown; second alarm 6.11 a. m.; third alarm 6.29 a. m.
"	19	27	.....	1.18 Box car on North st.	N. C. R. R. Co.	Freight for J. Horner, Jr.	6	4	.....	Loss $500; recall 2.02 p. m.; sparks from locomotive setting fire to rags.
Sunday	20	8	12.37	..... Pier No. 9, Locust Point.	.....	Loose Cotton.	.....	.....	.....	Loss none; recall 1.03 a. m.; lighted cigar thrown from deck of vessel.
"	20	262	.....	5.18 379 N. Broadway, (in rear.)	E. Scoggins.	Stable.	9	3	Two-story frame.	Loss $100; recall 5.50 p. m.; boys smoking in stable loft.

Monday	21	621	4.35	.....	Rider's wharf.	.. ..	....	.....	.....	Steam tug Oriole.	Loss $1,763; recall 5.35 a. m.; wood work caught from furnace; tug was owned by P. Dougherty & Co., and lying at wharf with fires banked and watchman on board.
Friday	25	313	12.24	.....	34 Pleasant street, (in rear).	J. J. Turner.	Stable.	1, 7	2, 4	Two-story brick.	Loss $3,000; recall 2.27 a. m.; three horses, one cow and a calf were burned to death; cause of fire unknown; Fireman Edw. A. Sheeks, of No. 7 Engine Company, was badly injured by a fall from a ladder.
"	25	135	8.41	.....	Block and Point sts.	Jesse Tyson, President.	Balto. Chrome Works.	3	1	Two-story brick and frame.	Loss $600; recall 9.57 a. m.; wood work caught from heater pipes.
Sunday	27	35	12.04		110 W. Biddle st.	....	Dwelling.	....	.....	Two-story brick.	Loss none: recall 12.10 a. m.; police officer saw smoke coming from a window.
Monday	28	4	12.42	.....	1 S. Calvert street.	Towles Bros. and others.	Shirt Factory, &c.	4	1, 2	Six-story brick.	Loss $890; recall 1.44 a. m.; fire was on the third floor.

Record of Fires and Alarms for the year ending December 31, 1883.

Date.	Box.	Hour A.M.	Hour P.M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
Monday 28	423	8.35	.....	476 W. Lexington street (in rear).	W. W. Hustens.	Baker and Confectioner.	.....	.....	Two-story brick.	Loss none; recall 8.44 a. m.; grease taking fire on stove; extinguishers Nos. 1 and 8 Engine and 2 Hook and Ladder Companies.
" 28	263	10.33	.....	Bond and Hoffman streets.	Estate Jeremiah Fletcher.	Stable.	9	4	Frame.	Loss $100; recall 11.35 a. m.; supposed incendiary.
Thurs'y 31	143	.....	3.48	70 and 72 Fawn st.	Standard Co.	Can Factory.	3	3	Four-story brick.	Loss $100; recall 4.09 p. m.; leak in the pipe; gasoline oil ignited from furnace.
" 31	413	.....	5.45	141 W. Fayette st.	Wise & Son.	Shirt Manufactory.	....	.....	Four-story brick.	Loss $20; recall 6 p. m.; sparks from smoke stack setting fire to roof; extinguishers No. 2 Hook and Ladder Company.
June. Friday 1	39	.....	9.35	Pennsylvania and Boundary avenues.	B. C. P. R. W. Co.	Paint Shop.	.....	.....	Two-story frame.	Loss $20; recall 9.48 p. m.; spontaneous combustion of

											greasy waste; extinguishers No. 4 Hook and Ladder and 13 Engine Companies.
Satur'y	2	142	11.44	.....	Pank street and Central avenue.	Mrs. M. Carroll.	Grocery and Dwelling.	.....	.....	Three-story brick.	Loss $12; recall 12.06 p. m.; roof caught from a foul chimney; extinguishers No. 3 Engine and No. 3 Hook and Ladder Companies.
Sunday	5	156	4.45	.....	Foot of Broadway.	.....	.....	.....	.....	Steam tug Amanda Powell.	Loss $485; recall 5.44 a. m.; slight fire below the deck, caused by heat from boiler; extinguishers 3, 5 and 11 Engine and 3 Hook and Ladder Companies.
Wedn'y	6	8	8.18	.....	7 Cuba st., (in rear.)	Michael McGuire and others.	Stable and Store House.	12	2	Two-story frame.	Loss $646; recall 9.25 a. m.; B. & O. R. R. Co's fire brigade also lead a stream on.
Thurs'y	7	152	.....	3.41	619 W. Fayette st.	M. H. Hirshberg.	Dwelling.	....	.....	Three-story brick.	Loss none; recall 3.52 p. m.; grease on stove boiled over and set fire to carpet and furniture; extinguishers Nos. 8 and 13 Engine Companies.
"	7	154	.....	11.32	33 Thames street.	Thos. Foley.	Sailors' Boarding House.	.....	.....	Three-story brick.	Loss $88; recall 11.48 p. m.; coal-oil lamp upset; extinguishers 5 and 11 Engine

***

Record of Fires and Alarms for the year ending December 31, 1883.

Date.	Box.	Hour A. M.	Hour P. M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
										Companies and 3 Hook and Ladder Companies.
Monday 11	5	.....	7.08	11 S. Charles street.	Wm. Seemuller & Co.	Auctioneers and Store Room.	1, 2, 3, 4	1, 2	Five-story brick.	Loss $10,309.83; recall 9.04 p. m.; spontaneous combustion of upholsterers' material on 4th floor; all the windows were blocked up by furniture, etc.
Friday 15	8	1.31	.....	33, 35, 37, 39 and 41 Hanbert street (in rear.)	Rody Dunn and others.	Stables, Outhouses, &c.	2, 12	.....	Frame.	Loss $3,000; recall 3.59 a. m.; cause unknown; steam tug Convoy, of the B. & O. R. R. Co., was in service.
" 15	8	.....	8.22	Locust Point.	.....	Lumber Pile.	.....	.....	.....	Loss $10; recall 8.37 p. m.; sparks from a locomotive; regulating engine B. & O. R. R. Co., in service.
Satur'y 16	42	2.15	.....	28 N Paca street (in rear.)	Michael Scanlin.	Liquor Store and Dwelling.	.....	.....	One-story frame shed.	Loss $15; recall 2.32 a. m.; cigar thrown on a shingle roof;

											extinguishers 1 and 7 Engine and 2 Hook and Ladder Companies.
Thurs'y	21	316	.....	9.56	North and Centre sts	John Snyder.	Farber House Hotel.	.....	.....	Four-story brick.	Loss $25; recall 10.06 p. m.; lace curtain blowing against a gas jet; extinguishers No. 6 Engine Company.
Sat'r'y	23	212	.....	8.54	6 N. Frederick st.	M. D. Banks & Co.	Furniture Factory.	.....	.....	Six-story brick.	Loss none; recall 9.13 p. m.; lighted cigar dropped through the open grating set fire to a pile of rubbish; extinguishers No. 1 Hook and Ladder Company.
Monday	25	54	4.17	.....	Hill and Hanover sts.	James King.	Grocery and Public Hall.	2	2	Three-story brick	Loss $665; recall 4.40 a. m.; supposed incendiary; the fire was in the rear part of the store, around a barrel partly filled with coal oil; the spiggot of the barrel was turned on.
Wed'n'y	27	324	3.18	.....	Preston street and Morgan alley.	Frank W. Sanderson.	Grocery and Provision, &c.	7, 13	4	Three-story brick	Loss $607.27; recall 4.22 a. m.; supposed from overheated stove.
July Sunday	1	8	12.33	.....	Cuba and Beacon sts.	Coates Bros.	Rolling Mill.	12	2	Two-story brick and frame.	Loss $3,077.10; recall 2.03 a. m.; B. & O. fire brigade and

Record of Fires and Alarms for the year ending December 31, 1883.

Date.	Box.	Hour A.M.	Hour P.M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
										stream from elevator pump were also in service; roof of adjoining building was slightly damaged.
Monday	23	16	.....	11.19	171 North street.	Jas. McMillan.	Machine Shop.	.....	.....	Three-story brick. Loss $100; recall 11.50 p. m.; heat from the boiler of the engine, which was running at a full rate of speed, furnishing power to the United States Electric Light Co., set fire to the wood work.
Wedn'y	4	21	6 10.40	.....	60 Aisquith street.	Geo. Louderman.	Dwelling.	.....	.....	Three-story brick. Loss $88; recall 10.52 a. m.; a red compound used in making fireworks spontaneously ignited; extinguishers Nos. 6 and 9 Engine Companies.
Thurs'y	5	27	.....	1.19	39 Shutter street.	Levin Manner.	Dwelling.	.....	.....	Two-story brick. Loss $20; recall 1.40 p. m.; clothes hang-

												ing around stove taking fire; extinguishers No. 9 Engine Company.
Sunday	8	21	.....	3.20	59 N. Gay street.	J. Lory and others.	Tenement House.	.....	.....	.....	Two-story brick.	Loss $38; recall 3.40 p. m.; hot ashes in a wooden box on the roof set fire to the cover'g of the roof; extinguishers No. 1 Hook and Ladder Company.
Wedn'y	11	561	11.59	.....	Leadenhall street.	G. Dambmann. & Co.	Fertilizers and Acids.	.....	.....	.....	.....	Loss $10; recall 12.12 a. m.; a tank of boiling oil took fire; extinguishers No. 2 Engine Company.
Friday	13	35	.....	3.55	101 Preston street.	Robert Gross, (colored.)	Junk Shop.	.....	.....	.....	Two-story frame.	Loss $25; recall 4.12 p. m.; fire from a pipe falling among loose papers; extinguishers No. 7 Engine Company.
Tuesday	17	21	.....	9.51	86 N. Gay street.	Geo. W. Cruse.	Cigar Store and Dwelling.	.....	.....	.....	Four-story brick.	Loss $10; recall 10 p. m.; window curtain taking fire from a gas jet; extinguishers No. 6 Engine and 1 Hook and Ladder Companies.
Wedn'y	18	561	9.16	.....	187 West street.	Wm. Thomas and others.	Dwelling.	2	2	.....	Two-story brick.	Loss $140.83; recall 9.55 a. m.; children playing with fire.
Thurs'y	19	231	.....	11.02	23 Walker street.	Joseph Swift.	Dwelling.	.....	.....	.....	Two-story brick.	Loss $29.25; recall 11.13 p. m.; clothing

Record of Fires and Alarms for the year ending December 31, 1883.

Date.	Box.	Hour A. M.	Hour P. M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
										in a cupboard taking fire from a candle; extinguishers No. 9 Engine Company.
Friday	20	216	2.56	123 N. Central ave.	H. Goldsmith.	Junk Store and Dwelling.	6	1	Three-story brick.	Loss $395.75; recall 4.12 a. m.; supposed to be caused by rats knawing loose matches in paper stock.
Monday	30	541	4.24	Little Montgomery street and China alley.	John Scully.	Clothing and Junk Store.	.....	.....	Two-story brick.	Loss $200; recall 4.41 a. m.; cause unknown; extinguishers No. 2 Engine and 2 Hook and Ladder Companies.
Tuesd'y	31	71	.....	1.55 Fort ave., (in rear).	P. Zell & Sons.	Fertilizer Manufactory.	12	2	One-story frame.	Loss $15; recall 2.50 p. m.; spontaneous combustion caused by sun shining on greasy bags.
"	31	13	.....	9.33 Concord street.	C. Hollander & Sons	Furniture Factory.	.....	.....	Six-story brick.	Loss $50; recall 10.06 p. m.; fire was in front and rear of fifth story, among greasy rags and var-

											nish; extinguishers No. 1 Hook and Ladder Company.
August Wedn'y	1	426	.....	12.56	5 Little Vine street.	Andrew Cole.	Dwelling.	.....	.....	Three-story brick.	Loss $70; recall 1.08 p. m.; defective flue setting fire to woodwork; extinguishers No. 8 Engine and 2 Hook and Ladder Companies.
"	1	327	.....	2.25	462 Eutaw Place (in rear).	Thomas Janney.	Stable.	13	4	Two-story brick.	Loss $350; recall 3.04 p. m.; spontaneous combustion of new hay.
Thurs'y	2	42	.....	3.31	Lexington and Greene streets.	C. D. Kenny & Co.	Grocery.	.....	.....	Four-story brick.	Loss $90; recall 4.08 p. m.; heated cylinder filled with coffee set fire to woodwork, and it burned up through the roof; extinguishers Nos. 1 and 7 Engine and 2 Hook and Ladder Companies.
Friday	3	561	.....	12.53	145 S. Sharp street.	H. Classen & Sons.	Hay Storage.	2, 12	2	Frame Shed.	Loss $450; recall 1.50 p. m.; boys playing with fire on an adjoining lot.
"	3	45	.....	10.17	White's alley, betw. Poppleton and Schroeder streets.	—— Clements.	Stable.	....	.....	Two-story brick.	Loss $20; recall 10.41 p. m.; parties smoking in the loft; extinguishers 8 and 13 Engine and 4 Hook

Record of Fires and Alarms for the year ending December 31, 1883.

Date.	Box.	Hour A.M.	Hour P.M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
										and Ladder Companies.
Satur'y	4	412	.....	5.48	7 N. Charles street.	Unfinished Building.	Unoccupied.	.....	.....	Four-story brick. Loss $15; recall 6.08 p. m.; fire from a pipe falling into loose shavings; extinguishers No. 1 Hook and Ladder Company.
Sunday	5	173	2.10	.....	Lancaster street.	Consolidated Gas Co.	Lime Storage.	11	3	Frame shed. Loss $500; recall 3.36 a. m.; caused by lime in shed slacking.
"	5	243	.....	10.15	6 Price's Court.	Charles Nelson.	Dwelling.	....	.....	Two-story brick. Loss none; recall 10.27 p. m.; coal-oil lamp upset; extinguishers No. 6 Engine Company.
Monday	6	72	.....	10.52	Covington and Donaldson streets.	J. Horner & Bro.	Fertilizer Manufactory.	12	.....	Three-story brick. Loss none; recall 11.06 p. m.; spontaneous combustion of a lot of greasy rubbish.
Wedn'y	8	61	8.16	.....	12 Hill street.	John Carle.	Dwelling.	.....	.....	Three-story brick. Loss $469; recall 8.50 a. m.; child playing with fire; extinguishers No. 2 Engine and No. 2

											Hook and Ladder Companies.
Wedn'y	8	421	.....	2.44	Lexington and Arch streets and several surround'g buildings.	Matthai, Ingram & Co. and others.	Tinware Factory, &c.	1, 2, 4, 5, 6, 7, 8, 10, 13	1, 2, 4	Three-story brick.	Loss $65,538.81; recall 12.51 a. m., 9th: caused by the bursting of a gasoline fire-pot in the tin factory; three hundred employees in the build'g escaped safely; a number of neighboring houses were injured, principally roofs burn'd; second alarm 2.48: third alarm 3.03 p. m.
Thurs'y	9	342	10.44	.....	370 Cathedral street.	L. E. Railey.	Dwelling.	.....	.....	Three-story brick.	Loss none; recall 10.59 a. m.; roof caught fire from foul chimney; extinguishers No. 4 Hook and Ladder Company.
"	9	425	11.50	.....	683 W. Baltimore street.	Robt, Leroy.	Store and Dwelling.	.....	.....	Three-story brick.	Loss $30; recall 12 m.; rags in the 3d story; extinguishers No. 4 Hook and Ladder Company.
"	9	143	.....	1.38	43 Granby street.	Mrs. R. Shamburger.	Dwelling.	.....	.....	Three-story brick.	Loss $50; recall 1.54 p. m.; clothes-press caught fire from a stove; extinguishers No. 3 Engine Company.

****

Record of Fires and Alarms for the year ending December 31, 1883.

Date.	Box.	Hour A. M.	Hour P. M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
Satur'y 11	23	6.48	.....	108 and 110 Orleans street.	John Rodman and others.	Dwellings.	.....	.....	Three-story brick.	Loss $250; recall 7.15 a. m.; defective flue set fire to wood work; extinguishers 6 and 9 Engine and 3 Hook and Ladder Companies.
Monday 13	363	6.25	.....	8 Chestnut alley.	Geo. W. Denly.	Dwelling.	.....	.....	Three-story brick.	Loss $10; recall 6.36 a. m.; roof caught fire from foul chimney; extinguishers No. 8 Engine Company.
Tuesd y 14	323	.....	11.13	167 Pennsylvania avenue.	Owen Trainer & Son.	Junk Store.	7, 8, 13	4	Three-story brick and frame.	Loss $641; recall 12.56 a. m., 15th; fire began in pile of rags, supposed by rats nibbling matches.
Thurs'y 16	121	.....	6.01	30 South street.	Fisher & Son and others.	Offices.	.....	.....	Four-story brick.	Loss $70; recall 6.34 p. m.; cause unknown; fire was in a pile of paper and lumber on 4th floor; extinguishers No. 1 Hook and Ladder

											and 3, 4 and 6 Engine Companies.
Satur'y	18	52	11.35	.....	Barre st. (in rear).	S. H. Weaver.	Blacksmith and Wheelwright.	2		2	Two-story frame.	Loss $60; recall 12.09 p. m.; heat from chimney setting fire to dry lumber.
Thurs'y	23	4	1.16	.....	6 S. Calvert street.	W. J. Hooper.	Herald Office, &c.	.....	.....	.....	Six-story brick.	Loss $50; recall 2.18 a. m.; heat from furnace setting fire to covering around the smoke stack; extinguishers No. 4 Engine and 1 Hook and Ladder Companies.
Friday	24	36	.....	8.19	3 Smith street.	Nicholas Gill.	Dwelling.	.....	.....	.....	Three-story brick	Loss $4; recall 8.29 p. m.; explosion of a coal-oil lamp; extinguishers No. 13 Engine Company.
Satur'y	25	431	.....	7.19	Scott and Pratt sts.	Hayward, Bartlett & Co.	Iron Foundry.	.....	.....	.....	Two-story brick.	Loss $30; recall 7.46 p. m.; hot iron setting fire to flasks and wood work; extinguishers No. 10 Engine and 2 Hook and Ladder Companies.
"	25	34	.....	11.46	73 Cathedral street.	R. H. Mitchell.	Dwelling.	.....	.....	.....	Four-story brick.	Loss $99.98; recall 12.05 a. m., 26th; clothing taking fire from a candle; extinguishers No. 7 Engine and 4 Hook

Record of Fires and Alarms for the year ending December 31, 1883.

Date.	Box.	Hour A.M.	Hour P.M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
Sunday 26	53	12.14	.....	Scott and Cross sts., (in rear.)	Wm. E. Wood & Co.	Iron Foundry.	.....	.....	Two-story brick.	and Ladder Companies. Loss $25; recall 12.35 a. m.; hot iron setting fire to flasks and window frame; extinguishers No. 10 Engine and 2 Hook and Ladder Companies.
" 26	16	.....	8.28	380 N. Gay street.	Patrick Meehan.	Grocery and Dwelling.	.....	.....	Three-story brick.	Loss $13.25; recall 8.40 p. m.; slacking lime setting fire to a barrel; extinguishers 6 and 9 Engine Companies.
Monday 27	471	5.31	.....	78 Vincent alley.	W. P. Bird & Bro.	Stable.	13	4	Two-story brick.	Loss $100; recall 6.04 a. m.; cause unknown.
" 27	324	8.30	.....	2 and 4 Division st.	Henry Knell and C. W. Street.	Slaughter House.	7, 8, 13	4	Four-story brick.	Loss $1,000; recall 9.35 a. m.; sparks from chimney set fire to and burned off the roof of one building.

Monday	27	4	2	.....	6.31	Baltimore and Paca streets.	Parkhurst & Parks.	Printing Office.	.....	.....	Four-story brick.	Loss $119.96; recall 7.01 p. m.; waste paper caught fire in back room, 2d story; extinguish'rs Nos. 1, 7 and 10 Engine and 2 Hook and Ladder Companies.
Wedn'y	29	613		.....	7.56	Covington and Montgomery sts.	Marine Oakum Co	.....	2, 10, 12	2	Two-story brick.	Loss $1,860.90; recall 9.45 p. m.; overheated pipes in drying room set fire to material; fire was confined to rear part of building.
September.												
Sunday	2	234		7.16	.....	255 Orleans street.	Joseph Mason.	Dwelling.	.....	.....	Three-story brick.	Loss $31.40; recall 7.31 a. m.; children playing with matches set fire to clothing; extinguishers No. 9 Engine Company.
Wedn'y	5	48		.....	11.47	Frederick road, (Baltimore co).	Passionist Brothers.	Monastery.	8	4	Four-story brick.	Loss $60,000; recall 6.55 a. m., 6th; supposed to have originated from a tinner's pot on roof.
Friday	7	24		.....	9.28	Ensor and East sts.	M. C. Weber.	Sofa Manufactory.	6	1	Three-story brick.	Loss $161; recall 9.59 p. m.; cause unknown.
Satur'y	8	38		.....	9.26	15 Roberts street.	Thomas Camp.	Dwelling.	.....	.....	Three-story brick.	Loss $40; recall 9.48 p. m.; coal-oil lamp upset; exting'hers

Date.	Box.	Hour A. M.	Hour P. M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
										No. 13 Engine Company.
Satur'y 8	234	.....	10.47	Centre of block bet. Mullikin, Fayette, Ann street and Broadway.	Henry S. Taylor & Co.	Pottery.	5, 9, 11	3	Four two-story frame buildings and several frame sheds.	Loss $4,289.15; recall 1.02 a. m., 9th; heat from kiln used in burn'g earthenware setting fire to frame work around it.
Sunday 9	135	5.17	.....	Block and Point sts.	Price & Heald.	Sash Factory.	3	1	One-story frame shed.	Loss $50; recall 5.55 a. m.; sparks from furnace under boiler set fire to shavings.
Monday 10	15	2.04	.....	219 Eastern avenue.	Mrs. M. Bayne.	Dwelling.	.....	.....	One-story frame shed.	Loss $10; recall 2.24 a. m.; clothing taking fire from stove; extinguishers No. 3 Hook and Ladder Company.
" 10	251	.....	3.48	275 and 277 Aisquith street.	Edw. Welmore. James O'Donnell.	Dwellings.	6	4	Two-story brick.	Loss $280; recall 4.26 p. m.; sparks from chimney set fire to shingle roof.
" 10	413	.....	8.37	112 Lexington st.	Kahn & Co.	Dry Goods Store.	.....	.....	Four-story brick.	Loss $556.26; recall 11.07 p. m.; explosion of a coal-oil
					Mrs. J. E. Oliver.	Board'g House.				

											lamp; fire commenced on 2d floor and went up to the roof; extinguishers 1, 2, 4 and 7 Engine and 2 and 4 Hook and Ladder Companies.
Monday	10	8	.....	9.22	Pier 32, Locust Point.	.....	.....	12	4	Steamship Nessmore.	Loss $500; recall 11.10 p. m.; fire was among the cotton between decks; steamer was loaded with grain, tobacco and cotton.
"	10	173	.....	11.25	56 Luzerne street, (in rear).	F. H. Welhamsen	.....	11	3	One-story frame shed.	Loss $133.90; recall 11.58 p. m.; cause unknown.
Wedn'y	12	46	.....	11.55	3 S. Calhoun street.	Geo. M. Hay, Jr.	Lime and Feed Store and Stable.	8, 10	4	Two-story brick. One-story frame.	Loss $1,500; recall 1.36 a. m., 13th: caused by lime slacking under a leaky roof; the place was destroyed before the alarm was turned in.
Friday	14	46	7.36	.....	956 W. Baltimore st.	Wm. Holmes.	Dwelling.	.....	.....	Three-story brick.	Loss $269.99; recall 8.40 a. m.; defective flue; extinguishers 8, 10 and 13 Engine and 4 Hook and Ladder Companies.
Satur'y	15	152	.....	5.15	23 S. Regester street	Wm. Shane.	Dwelling.	.....	.....	Three-story brick.	Loss $45; recall 5.37 p. m.; defective flue; extinguishers 5 En-

Date.	Box.	Hour A.M.	Hour P.M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
										gine and 3 Hook and Ladder Companies.
Satur'y 15	432	.....	8.14	583 W. Pratt street.	Andrew Roemer.	Dwelling.	.....	.....	Three-story brick.	Loss $82; recall 8.27 p. m.; coal-oil lamp falling, set fire to a bed; extinguishers 10 Engine and 2 Hook and Ladder Companies.
Monday 17	231	3.31	.....	47 and 49 McElderry street. 167 Eden street.	Henry Leidbeck and others.	Bake House, &c.	3, 6, 9	3	Two-story frame. Two-story brick. Three-story brick.	Loss $1,713.54; recall 5.11 a. m.; fire commenced in a building used as a bake house, in rear of a three-story brick building, and was caused by the fat in which they were frying doughnuts catching fire.
Thurs'y 20	312	8.55	.....	College alley and Little Pleasant st.	C. D. Kenny.	Stable.	1, 2, 7	1, 2	Two-story brick.	Loss $350; recall 10.10 a. m.; parties smoking in the loft, to which the fire was confined.

Friday	21	13	.....	6.44	6 West Falls avenue.	J. M. Marquette.	Machine Shop.	3	1	Three-story brick.	Loss $214; recall 7.21 p. m.; heat from boiler setting fire to wood work.
"	21	13	.....	10.21	6 West Falls avenue.	J. M. Marquette.	Machine Shop.	....	.....	Three-story brick.	Loss included in above; recall 11.10 p. m.; same fire broke out again between the joists; extinguishers No. 3. Engine and 1 Hook and Ladder Companies.
Satur'y	22	241	10.18	.....	103 Front street, (in rear).	J. Musgrave & Son.	Tan Yard and Bark Mill.	....	.....	Three-story brick.	Loss none; recall 10.34 a. m.; flue of the boiler blowing out and setting fire to rubbish; extinguish'rs No. 1 Hook and Ladder Company.
Sunday	23	45	2.48	.....	425 Saratoga street.	John B. Welsh.	Feed Store.	8, 13	4	Three-story brick.	Loss $40; recall 3.21 a. m.; loose hay caught fire in the cellar.
"	23	561	.....	5.47	Leadenhall street, between West and Stockholm streets.	Lorentz & Rittler	Manufacturers of Fertilizers.	2, 12	2	Four-story brick. One-story frame.	Loss $579.93; recall 7.17 p. m.; fire from a lamp falling into a barrel partly filled with oil; fire was confined to engine room.
Monday	24	13	.....	8.02	103 and 105 McElderry's wharf.	Morton D. Banks	Furniture Warehouse.	3, 4, 5	1	Four-story brick. (double.)	Loss $1,200; recall 8.30 p.m.; caused by

*****

Date.	Box.	Hour A. M.	Hour P. M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
										spontaneous combustion.
Wedn'y 26	61	11.17	.....	Pier No. 10, Light st. wharf.	.....	Steamboat Wharf.	2	2	.....	Loss $340; recall 12.18 p. m.; sparks from steamer setting fire to cotton; wharf was piled up with cotton.
" 26	313	11.22	.....	Charles and Franklin streets.	Atheneum Club.	Club House.	.....	.....	Three-story brick.	Loss none; recall 11.40 a. m.; foul chimney; extinguishers No. 7 Engine and 4 Hook and Ladder Companies.
Thurs'y 27	13	.....	1.57	37 E. Pratt street.	Mrs. K. Miller.	Stocking Factory and Tenement House.	.....	.....	Four-story brick.	Loss $150; recall 2.17 p. m.; cause unknown; exting'hers 3 and 5 Engine and 1 Hook and Ladder Companies.
" 27	153	.....	11.57	Central ave. and Aliceanna street.	Adams Bros.	Box Factory.	.....	.....	Four-story brick.	Loss $25; recall 1.15 a. m., 28th; falling of the brick work on the furnace used for burning shavings; extinguishers

											3 and 5 Engine and 3 Hook and Ladder Companies.
Friday	28	425	4.55	.....	.....	.....	.....	.....	.....	.....	Loss none; recall 5.10 a. m.; false alarm, caused by light from Perine's pottery.
Satur'y	29	364	.....	5.07	15 Little Pine street.	Alex. Thomas.	Dwelling.	.....	.....	Three-story brick	Loss $15; recall 5.37 p. m.; partition in 3d story caught fire from stove; extinguishers No. 4 Hook and Ladder Company.
October.											
Tuesd'y	2	31	.....	4.45	Franklin and Calvert streets.	H. Luck.	American Hotel.	.....	.....	Six-story brick.	Loss none; recall 4.59 p. m.; defective flue; extinguishers No. 4 Engine Company.
Wedn'y	3	62	.....	4.19	134 West street.	Adam Croft.	Dwelling.	.....	.....	Three-story brick.	Loss $80; recall 5 p. m.; sparks from a tinner's pot setting fire to roof; extinguishers Nos. 2 and 12 Engine and 2 Hook and Ladder Companies.
"	3	123	.....	6.03	3 Patterson street.	Theo. Horn.	Furniture Factory.	2, 3	1	Four-story brick.	Loss $474.36; recall 7.02 p. m.; fire originated in and was confined to front part of 2d story.
Friday	5	35	2.38	.....	288 Madison street.	F. Lauterbach.	Confectionery and Dwelling.	.....	.....	Four-story brick.	Loss $185; recall 4.42 a. m.; heat from

Date.	Box.	Hour A.M.	Hour P.M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
										oven set fire to joist and floor above it; extinguishers 7, 8 and 13 Engine and 4 Hook and Ladder Companies.
Satur'y	6	514	.....	12.05	86 Dover street.	Thos. Cross.	Dwelling.	.....	.....	Four-story brick.	Loss $10; recall 12.15 p. m.; children playing with fire set fire to bed in 3d story; extinguishers No. 2 Engine Company.
Sunday	7	71	12.50	.....	120 Fort avenue (in rear).	August Alricks.	Stable.	12	2	Three-st'ry frame.	Loss $200; recall 1.37 a. m.; cause unknown.
"	7	314	.....	9.47	Franklin and Park streets.	Dr. C. Johnson.	Dwelling.	.....	.....	Four-story brick.	Loss $105; recall 10.01 p. m.; curtain taking fire from gas jet; extinguishers No. 7 Engine and 2 and 4 Hook and Ladder Companies.
Tues'l'y	9	61	.....	8.05	Centre of square between Barre, Light, Conway & Charles streets.	George Sloan.	Lumber Yard.	.....	.....	.....	Loss $20; recall 8.44 p. m.; cause unknown; extinguishers No. 2 Engine Com-

											pany and buckets of water.
Tues'y	16	461	7.38	.....	24 Vincent alley.	George Griffin.	Dwelling.	.....	.....	Two-story brick.	Loss none; recall 7.52 a. m.; foul chimney; fire extinguishers.
Wedn'y	17	313	.....	9.44	107 St. Paul street.	Mrs. L. Newman.	Boarding House.	.....	.....	Four-story brick.	Loss $112.80; recall 10.13 p. m.; open fire set fire to floor and wooden mantel; extinguishers No. 7 Engine and 4 Hook and Ladder Companies.
Thurs'y	18	323	11.44	.....	239 Pennsylv'a ave.	A. Linebaum.	Jewelry Store and Dwelling.	.....	.....	Three-story brick.	Loss $125; recall 12.10 p.m.; children playing with fire; extinguishers 7, 8 and 13 Engine and 4 Hook and Ladder Companies.
Monday	22	313	.....	9.17	65 N. Charles street.	F. D. Polk & Bro. and others.	Station'y Store and Boarding House.	7		2, 4	Three-story brick.	Loss $2,960.90; recall 10.19 p. m.; overheated stove set fire to goods around it.
Wedn'y	24	512	.....	2.37	41 Hanover street.	Thos. Godey & Son.	Furniture Dealers.	.....	.....	.....	Six-story brick.	Loss $25; recall 3.03 p. m.; cause unknown; fire was confined to a lot of Excelsior and loose paper under basement steps.
Friday	26	324	.....	7.56	159 Druid Hill ave., (in rear).	Thos. J. Oliver.	Carpenter Shop.	.....	.....	.....	.....	Loss none; recall 7.59 p. m.; there was no fire; alarm was

Date.	Box.	Hour A. M.	Hour P. M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
										sounded for a light in the shop.
Satur'y 27	12	.....	9.54	Gay and Second sts.	Marine Bank.	Bank.	.....	.....	Four-story brick.	Loss $46; recall 10.50 p. m.; extinguishers No. 1 Hook and Ladder, and 3, 4 and 6 Engine Companies.
Monday 29	412	8.23	.....	31 Hanover street.	George Franke.	Paper Box Factory.	.....	.....	Four-story brick.	Loss none; recall 8.32 a. m.; smoke from the furnace came out of the window in such quantity as to alarm the employees.
" 29	13	.....	10.09	70 Centre Market Space.	Wm. Sewell.	Store and Dwelling.	.....	.....	Three-story brick.	Loss none; recall 10.26 p. m.; alarm sounded for smoke and sparks from chimney.
Tuesday 30	53	.....	1.42	Columbia avenue, near Bayard street.	J. A. McGreery.	Manufact'er of Lamp Black.	10	2	One-story frame.	Loss $50; recall 2.38 p. m.; vapor from oil in a still caused an explosion and set fire to the shed.

November.											
Thurs'y	2	2	51	.....	4.22	214 Harford avenue (in rear).	J. J. Harker.	Carpenter shop.	.....	.....	Two-story frame.	Loss $20; recall 4.37 p. m.; sparks from foul chimney; extinguishers 6 and 9 Engine Companies.
Satur'y	3	1	10	25	.....	217 Light street.	Jas. Redington.	Restaurant and Dwelling.	.....	.....	Three-story brick.	Loss $12; recall 10.35 a. m.; furniture catching fire from overheated stove; extinguishers No. 2 Engine Company.
"	3	4	23	.....	7.47	52½ Raleigh street.	S. Anderson and John Black	Restaurant and Dwelling.	.....	.....	Three-story brick.	Loss $228; recall 8.51 p. m.; explosion of coal-oil lamp; extinguishers Nos. 1, 8 and 10 Engine and 2 Hook and Ladder Companies.
Friday	9		4	.....	9.53	166 W. Baltimore st.	Lilly, Rogers & C.	Drug Store.	.....	.....	Five-story brick.	Loss none; recall 10.04 p. m.; electric-light wire set fire to wood work; extinguishers No. 1 Hook and Ladder Company.
Monday	12		54	9.50	.....	50 Hill st. (in rear).	M. Greenbaum.	Dwelling.	.....	.....	One-story frame.	Loss $15; recall 10.04 a. m.; overheated stove set fire to partition; extinguishers 2 and 12 Engine Companies.
"	12		51	.....	8.45	59½ S. Charles street.	Jos. Shroeder.	Leaf Tobacco Store.	1, 2, 3, 4	1, 2	Four-story brick.	Loss $8,182; recall 11.14 p. m.; American District alarm;

Date.	Box.	Hour A.M.	Hour P.M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
										heat from furnace setting fire to leaf tobacco in drying room.
Wedn'y 14	13	.....	7.42	Lombard st., from West Falls avenue to Concord street.	Assendorf & Dreyer.	Box and Trunk Factory.	1, 2, 3, 4, 5, 6, 9	1, 3	Two-story brick.	Loss $6,799.78; recall 10.53 p. m.; heat from furnace sett'g fire to wood work and lumber around it; commenced on 1st floor and went up through the skylight to 2d floor and spread; the centre of the roof was burned off; second alarm 7.46 p. m.
Friday 16	13	.....	5.35	22, 24 and 26 Concord street.	C. Hollander & Son.	Furniture Manufactory.	1, 2, 3, 4, 5, 6	1, 3	Six-story brick.	Loss $5,280; recall 7.25 p. m.; supposed spontaneous combustion of oiled rags; fire originated on 5th floor, and was confined to that and 6th floor; second alarm 5.40 p. m.

Satur'y	17	352	.....	1.01	414 Park avenue.	L. Turnbull.	Dwelling.	.....	.....	.....	Loss none; recall 1.16 p. m.; foul chimney; extinguishers No. 4 Hook and Ladder Company.
"	17	234	.....	7.28	89 Washington st.	Dolan Dunkell.	Provision Store and Dwelling.	.....	.....	Three-story brick.	Loss $40.50; recall 7.55 p. m.; joist running into chimney on 3d floor taking fire; extinguishers No. 3 Hook and Ladder and 5 and 9 Engine Companies.
Monday	19	45	.....	4.50	Republican street, between Lexington and Saratoga sts.	Male and Female Gram'ar School No. 15.	.....	8, 10, 13	4	Two-story brick.	Loss $670; recall 6.26 p. m.; floor above caught fire from furnace in cellar; floor and furniture destroyed.
"	19	16	.....	9.11	Gough and Wolfe streets.	Male and Female Primary School No. 23.	.....	.....	.....	Two-story brick.	Loss $130; recall 9.59 p. m.; overheated stove setting fire to floor; extinguish'rs 5 and 11 Engine and 3 Hook and Ladder Companies.
Friday	23	123	.....	5.14	84 W. Pratt street.	Bolton Bros.	Paints, Oils, &c.	.....	.....	Two-story brick.	Loss none; recall 5.40 p. m.; fire was in a rear build'g among a lot of straw, &c.; extinguishers 2 and 3 Engine and 1 Hook and Ladder Companies.

******

Record of Fires and Alarms for the year ending December 31, 1883.

Date.	Box.	Hour A. M.	Hour P. M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
Satur'y 24	135	.....	12.35	40 Block street.	James McNeal.	Dwelling.	....	.....	Three-story brick.	Loss $120; recall 1.05 p. m.; foul chimney; mantel in room slightly damaged.
Wedn'y 28	123	.....	1.51	Frederick and Lombard streets.	Alex. Carey and others.	Storage Warehouse.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	1, 2, 3, 4	Four-story brick.	Loss $90,221.93; recall 2.55 p. m.; December 1st; supposed cause, spontaneous combustion of loose cotton; warehouse contained about 1,600 bales of cotton, some tobacco, and other merchandise; the adjoining warehouses were only slightly damaged by tearing off the roofs, &c., to check the spread of the fire; the entire Department was in service in reliefs; second alarm 1.57 p. m.; third alarm 2.02 p. m.

Thurs'y	29	351	10.15	.....	376 Eutaw Place.	Bernard Carter.	Dwelling.	.....	.....	Four-story brick.	Loss none; recall 10.34 a. m.; foul chimney; exting'hers 13 Engine and 4 Hook and Ladder Companies.
"	29	413	.....	1.36	Howard and Fayette streets.	Henry Seim.	Paints and Window Glass.	.....	.....	Four-story brick.	Loss none; recall 1.57 p. m.; fire among loose straw in basement; extinguish'rs No. 1 Engine and 2 Hook and Ladder Companies.
Friday	30	251	12.09	.....	280 Chase street.	Henry Eberly.	Dwelling.	.....	.....	.....	Loss $10; recall 12.30 a. m.; defective flue set fire to cupboard; exting'hers 6 and 9 Engine Companies.
December.											
Monday	3	71	8.31	.....	Fort avenue and Burrough street.	Reese & Bro.	Iron manufacturers.	12	2	Frame shed.	Loss $90; recall 9.39 a. m.; caused by heat from furnace.
Tuesd'y	4	61	.....	7.46	York street, near William.	W. Cook & Co.	Kindli'g Wood Factory.	.....	.....	Frame shed.	Loss $10; recall 8.01 p. m.; heat from furnace set fire to shed over boiler; extinguishers No. 2 Hook and Ladder Company.
"	4	414		11.43	336 W. Baltimore st.	F. W. Maldeis.	Manufac'rer of Trunks, Harness, &c.	1, 2, 4, 7	1, 2	Four-story brick.	Loss $13,195.79; recall 2.53 a. m., 5th; supposed incendiary.
Wedn'y	5	415	5.21	.....	.....	.....	.....	.....	.....	.....	Loss included in the above; recall 8.44 a. m.; rekindling of

Date.	Box.	Hour A.M.	Hour P.M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
										the same fire; the building was thoroughly examined by the Chief, Assistants and others after the first alarm, and no sign of remaining fire could be detected; whilst in charge of the Salvage Corps an explosion occurred, immediately followed by a fierce outbreak of flames, for which this alarm was given.
Wedn'y	5	452	.....	12.18	70 N. Stricker st.	Jno. V. Hood.	Dwelling.	.....	.....	Three-st'ry brick.	Loss $147.82; recall 12.34 p. m.; children playing with matches; extinguishers 8 and 13 Engine and 4 Hook and Ladder Companies.

Wedn'y	5	34	.....	9.47	.....	.....	.....	.....	.....	.....	.....	Loss $5; recall 9.55 p. m.; city lamp on Morton alley; the reservoir of gasoline below the lamp took fire.
Thurs'y	6	512	.....	4.16	14 Balderston street.	Jno. T. Mitchell & Co.	Packing House.	2		2	Five-story brick.	Loss $10; recall 4.36 p. m.; gas leaking from the metre took fire from a candle and caused an explosion, and set fire to a barrel of varnish.
Friday	7	24	12.35	.....	123 Hillen street.	Geo. W. Smith.	Produce Dealer.	6		1	Three-story brick.	Loss $61; recall 1.15 a. m.; cause unknown.
"	7	24	.....	7.27	149 N. High street, (in rear).	Jno. Frish.	Carriage Factory.	6		1	Three-story brick.	Loss $1,250; recall 8.17 p. m.; fire commenced in a wagon that was standing in the stable.
Monday	10	254	3.12	.....	140, 142 and 144 E. North avenue.	Miss Ella Martin. Wm. Bibby. Ernest Riall.	Dwelling.	6, 7, 9		4	Three-story brick.	Loss $7,410.87; recall 7.40 a. m.; fire originated from unknown cause in No. 142, which was burned out; the other build'gs were only slightly damaged; there was great delay in sending in the alarm, and Miss Carrie Martin was badly

Date.	Box.	Hour A. M.	Hour P. M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
										injured by jumping from front balcony of the 2d story.
Monday 10	613	.....	1.08	Hughes street, near Covington.	Tyson & Co.	Flour Mill.	.....	.....	Three-story brick.	Loss $10; recall 1.43 p. m.; heat from journal setting fire to wood work around it; extinguishers No. 2 Engine and 1 and 2 Hook and Ladder Companies.
Tuesday 11	412	9.35	.....	216 and 218 W. Baltimore street.	Likes, Berwanger & Co.	Clothing House.	.....	.....	Five-story brick.	Loss $91; recall 11 a. m.; explosion of gas from leaking metre; extinguish'rs Nos. 1 and 4 Engine and 1 and 2 Hook and Ladder Companies.
Wedn'y 12	414	6.33	.....	332 W. Baltimore st.	M. Ring & Son.	Clothing House.	.....	.....	Five-story brick.	Loss none; recall 6.44 a. m.; smoke issuing from the windows, caused by lighting the fires.
" 12	24	.....	11.17	123 Hillen street.	Geo. W. Smith.	Produce Dealer.	.....	.....	Three-story brick.	Loss $12; recall 11.43 p. m.; overheated

											stove set fire to wood work; extinguishers No. 6. Engine and 1 Hook and Ladder Companies.
Thurs'y	13	325	.....	12.06	143 McCulloh street.	Henry Judik.	Dwelling.	....	.....	Four-story brick.	Loss $75; recall 12.33 p. m.; fire around the flue in 2d story; extinguishers No. 4 Hook and Ladder Company.
"	13	123	.....	9.33	46 W. Pratt street.	Chas. W. Toner.	Cigar Store.	....	.....	Four-story brick.	Loss $245; recall 10.09 p. m.; fire was in centre of 1st floor, and burnt through a board partition to the adjoin'g house; extinguishers No. 1 Hook and Ladder Company.
Satur'y	15	513	.....	5.33	Sharp and Pratt sts.	The Rand Co.	Furniture Manufactory.	2, 4	1, 2	Four-story brick.	Loss $2,811.14; recall 8.01 p. m.; fire was caused by spontaneous combustion of sweepings under the stairway of the 2d floor, and spread up through the varnishing room on 3d floor.
"	15	612	.....	8.03	York street, near Jackson.	Balto. Smelting Works.	....	2, 4, 12	4	One and two-story brick and frame.	Loss $4,773.64; recall 1.12 a. m., 16th: heat from boiler setting fire to wood

Record of Fires and Alarms for the year ending December 31, 1883.

Date.	Box.	Hour A.M.	Hour P.M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
										work; No. 4 Engine Company was specially called.
Monday 17	5	.....	8.05	20 German street.	Hooper & Wilson.	Printers.	.....	.....	Four-story brick.	Loss $25; recall 8.43 p. m.; the fire was in the floor between the 2d and 3d story, and was caused by sparks from a small engine; exting'hers 1 and 2 Hook and Ladder and 4 Engine Companies.
Tuesd'y 18	415	138	.....	Eutaw and German streets.	R. Sauer & Co.	Show Case Works.	.....	.....	Four-story brick.	Loss $15; recall 2.01 a. m.; fire caused by someth'g lighted being thrown into the water closet; extinguishers No. 2 Hook and Ladder Company.
" 18	382	.....	3.43	.....	.....	.....	.....	.....	.....	Loss none; recall 3.54 p. m.; false alarm.
Wedn'y 19	521	12.04	.....	60 Camden street.	F. Schneider.	Saloon and Dwelling.	.....	.....	Three-story brick.	Loss $80; recall 12.39 a. m.; candle setti'g fire to clothing; ex-

											ting'hers No. 2 Engine and 2 Hook and Ladder Companies.
Wedn'y 10	134	9.20	.....	Union Dock.	Baltimore Warehouse Co.	Storage Warehouses.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	1, 2, 3, 4	Four-story brick.	Loss $95.000; recall 12.30 p. m., 24th; fire originated from unknown cause in warehouse No. 1, of what are known as the "West Buildings," containing a large lot of cotton, canned goods, &c., and, as is usual with cotton fires, was very hard to subdue; the efforts of the firemen were directed towards confining the fire to the one building, in which they were successful; the gable wall at the southern end of the warehouse fell suddenly, injuring Ladderman J. V. Dougherty quite severely and Capt. W. M. Dunn slightly, both of No. 1 Hook and Ladder Company; second
*******											

Record of Fires and Alarms for the year ending December 31, 1883.

Date.	Box.	Hour A. M.	Hour P. M.	Locality.	Occupant.	How Occupied.	Engines in Service.	H. & L. in Service.	Style of Buildings.	Remarks.
Thurs'y	20	613	306	..... Hughes street, near Covington.	Tyson & Bro.	Grain Elevator and Mill.	1, 2, 3, 4, 6. 10, 12	1, 2	One-story brick, with frame towers.	alarm 9.25 a. m.; third alarm 9.28.a.m Loss $44,573.20; recall 3.14 p. m.; fire originated in one of the towers, supposed to be caused by friction of a pulley; the building contained about 50,000 bus. of corn.
"	20	561	.....	1.51 Peach alley, near Austin street.	H. Classen & Sons.	Flour and Forage Dealers.	2, 10	2	Frame shed.	Loss $850; recall 6.14 p. m.; shed contained a large lot of baled hay, straw and Excelsior.
Friday	21	532	838	..... 263 Lee street.	Mrs. M. Brown.	Dwelling.	.....	.....	Three-story brick.	Loss $130; recall 9.06 a. m.; from a stove pipe running thro' floor; extinguishers No. 10 Engine and 2 Hook and Ladder Companies.
"	21	613	10.17	..... Hughes street, near Covington.	Tyson & Bro.	Grain Eevlator &c.	.....	.....	One-story brick, &c.	Loss none; recall 10.50 a. m.; rekindling of fire in pile of corn.

Friday	21	415	.....	10.20	Eutaw and German streets.	R. Sauer & Co.	Show Case Factory.	1, 2, 3, 4, 6, 7, 8, 10	1, 2, 4	Four-story brick.	Loss $5,217.60; recall 2.56 a. m., 22d; heat from furnace under boiler on 3d floor set fire to wood work and burned up through the 4th floor, where a large quantity of lumber and moulding was stored.
Sunday	23	323	.....	1.46	140 Division street.	M. A. Brewer.	Dwelling.	.....	.....	Three-story brick.	Loss $25; recall 2.10 p. m.; overheated stove; extinguish'rs. Nos. 7 and 13 Engine and 4 Hook and Ladder Companies.
"	23	8	.....	3.57	7 Cuba street.	Michael Maguire.	Restaurant and Dwelling.	12	2	Three-story brick.	Loss $1,608.50; recall 6.55 p. m.; cause unknown.
Thurs'y	27	353	.....	5.24	430 Park avenue.	Basil Wagner.	Dwelling.	.....	.....	Four-story brick.	Loss $30; recall 5.58 p. m.; foul chimney set fire to timber against it under the roof; extinguishers Nos. 7 and 13 Engine and 4 Hook and Ladder Companies.
Sunday	30	52	.....	8.59	Hanover and Lee sts. (in rear.)	.....	.....	.....	.....	.....	Loss $5; recall 9.05 p. m.; explosn of city gasoline lamp.

PAY-ROLL.

ANNUAL SALARIES PAID MONTHLY.

1	Marshal	$2,500
1	Chief Engineer	2,000
2	Assistant Engineers, (each)	1,400
1	Superintendent of Machinery	1,400
1	Clerk and Secretary	1,200
1	Veterinary Surgeon	500

Engine Companies.

13	Captains, (each)	500
13	Enginemen, (each)	1,100
13	Assistant Enginemen, (each)	900
13	Hostlers, (each)	900
9	Firemen, (each)	800
87	Firemen, (each)	400

Hook and Ladder Companies.

4	Captains, (each)	500
4	Tillermen, (each)	900
4	Hostlers, (each)	900
4	Housemen, (each)	900
3	Laddermen, (each)	800
29	Laddermen, (each)	400
203	Total.	

ENGINE

— AND —

Hook and Ladder Companies,

APPARATUS AND MEMBERS.

ENGINE COMPANY No. 1

Has in charge one steam fire-engine, two four-wheel hose carriages, two fire-extinguishers, one fuel wagon, four horses and harness, with all necessary equipments for service.

NAMES.	AGE.	POSITION.	TIME IN SERVICE.	RESIDENCE.	FORMER OCCUPATION.
Permanent Employees					
Chas. E. Freburger...	36	Engineman..	8 years.	20 S. Paca street.....	Machinist.
James Nugent.....	27	As't Engm'n.	4 m'nths.	39 Columbia avenue..	Machinist.
Lewis J. Fresh.....	40	Driver	12 years.	25 Pearl street.....	Carpenter.
Robert Close.....	30	Fireman	4 "	176 George street.....	Iron Moulder.
Members at Call.					
Jacob H. Hayward.....	60	Captain.....	21 years.	202 W. Fayette street.	Painter.
William White.....	38	Fireman	15 "	1 Myrtle avenue.....	Carpenter.
John H. Morgan.....	32	"	11 "	68 Clay street.....	Paperhanger.
Edward R. Addison...	36	"	9 "	77 Amity street.....	Machinist.
Michael Halloran.....	27	"	3 "	35 Penn street.....	Plumber.
Andrew J. Connelly...	28	"	1 "	191 Mulberry street..	Driver.
John J. Flynn.....	32	"	5 "	561 Saratoga street...	Stonecutter.
Peter McLaughlin....	29	"	3 "	4 Ramsay street.....	Stonecutter.

ENGINE COMPANY No. 2

Has in charge one steam fire-engine, two four-wheel hose carriages, two fire-extinguishers, six horses and harness (two of which are for the use of the Chief Engineer), with all necessary equipments for service.

NAMES.	AGE.	POSITION.	TIME IN SERVICE.	RESIDENCE.	FORMER OCCUPATION.
Permanent Employees					
Thomas E. Wheatley..	43	Engineman..	15 years.	216 Lee street..	Machinist.
Sam'l W. Stansbury..	32	As't Engm'n.	8 "	98 Barre street.....	Machinist.
John Reed.....	36	Driver	15 "	81 Barre street.....	Carpenter.
C. Henry Hammel	31	Fireman	8 "	96 S. Sharp street.....	Plumber.
Members at Call.					
Jacob Hindes.....	58	Captain.....	15 years.	318 W. Lombard street	Chairmaker.
Thomas Rodenhi.....	47	Fireman	24 "	128 S. Howard street.	Chairmaker.
Charles Romoser.....	46	"	14 "	168 S. Sharp street.....	Gas Fitter.
Charles Causey.....	30	"	6 "	53 Henrietta street...	Canmaker.
Charles Klessel.....	40	"	6 "	92 Hill street.....	Carpenter.
James Humes.....	40	"	15 "	156 S. Sharp street...	Glasscutter.
John J. Ledden.....	33	"	6 "	6 Ramsay street.....	Clerk.
Charles Grund.....	39	"	2 "	96 S. Sharp street....	Boxmaker.

ENGINE COMPANY No. 3

Has in charge one steam fire-engine, two four-wheel hose carriages, two fire-extinguishers, four horses and harness, with all necessary equipments for service.

NAMES.	AGE.	POSITION.	TIME IN SERVICE.	RESIDENCE.	FORMER OCCUPATION.
Permanent Employees					
Thomas Humphreys..	40	Engineman..	11 years.	45 S. Exeter street....	Machinist.
Patrick F. Moriarty...	33	As't Eng'mn.	9 "	42 E. Lombard street.	Machinist.
John F. Pierce.....	40	Driver	8 "	10 S. Exeter street....	Baker.
Wm. F. Pasterfield....	29	Fireman	2 "	67 S. Exeter street....	Plumber.
Members at Call.					
Richard A. Lindsay...	40	Captain.....	11 years.	56 S. Exeter street....	Paperhanger.
James L. Lindsay.....	42	Fireman	5 "	73 S. Exeter street....	Paperhanger.
Thomas B. Strahan...	36	"	3 "	22 N. Exeter street...	Currier.
Charles A. Orem.....	33	"	2 "	36 E. Lombard street.	Painter.
Wm. H. Hartman.....	25	"	1 "	1 Trinity street.....	Plumber.
Martin Kirby.....	39	"	1 "	156 E. Lombard street.	Trunkmaker.
William H. Riley.....	37	"	1 "	123 Ensor street.....	Painter.
G. C. Hodges.....	40	"	1 "	7 S. Central avenue...	Painter.

ENGINE COMPANY No. 4

Has in charge one steam fire-engine, two four-wheel hose carriages, two fire-extinguishers, one reserve engine, four horses and harness, with all necessary equipments for service.

NAMES.	AGE.	POSITION.	TIME IN SERVICE.	RESIDENCE.	FORMER OCCUPATION.
Permanent Employees					
Frank K. Conway	32	Engineman	11 years.	99 N. Front street	Machinist.
John Gaffney	28	As't Eng'mn	7 "	249 W. Biddle street	Machinist.
Wm. E. Vanrossum	35	Driver	13 "	67 N. High street	Hostler.
Fielding H. Lucas	32	Fireman	3 "	268 Argyle avenue	Type Moulder.
Members at Call.					
George W. Horton	38	Captain	21 years.	166 N. Exeter street	Wireworker.
George W. Bentz	43	Fireman	15 "	52 N. Eutaw street	Baker.
James Allen	37	"	11 "	200 Barre street	Printer.
Earnest Schultz	31	"	6 "	31 Holland street	Tinner.
Robert Bradley	28	"	3 "	91 North street	Candymaker.
Joseph Daily	31	"	3 "	74 Watson court	Stonecutter.
Constant Seibert	32	"	2 "	1 Laurel street	Hostler.
Wilmer West	40	"	14 "	159 N. High street	Tinner.

ENGINE COMPANY No. 5

Has in charge one steam fire-engine, two four-wheel hose carriages, two fire-extinguishers, four horses and harness, with all necessary equipments for service.

NAMES.	AGE.	POSITION.	TIME IN SERVICE.	RESIDENCE.	FORMER OCCUPATION.
Permanent Employees					
Frederick L. Nelson...	36	Engineman..	9 years.	145 S. Ann street.....	Machinist.
John Linderman.....	36	As't Eng'mn.	3 "	192 S. Ann street.....	Machinist.
Henry Murphy.....	32	Driver.....	4 "	108 Collington ave...	Sugar-refiner.
Wm. B. Baker.....	26	Fireman.....	3 "	345 E. Fayette street...	Brass finisher.
Members at Call.					
Wm. G. Miller.....	60	Captain.....	15 years.	97 Gough street.....	House Carp'nt'r
James Peacock.....	60	Fireman	20 "	113 S. Wolfe street...	Ship Carp'nter.
James Reilly.....	31	"	4 "	220 E. Lombard st...	Painter.
Julius O. Krauch.....	48	"	11 "	147 Gough street.....	Tin&Sh't-irnwk
Wm. Baker.....	26	"	3 "	80 S. Castle street....	Laborer.
Edwin Bailey.....	36	"	11 "	178 Gough street.....	House Carp'nt'r
Wm. T. Disney.....	34	"	9 "	109 S. Ann street.....	Bricklayer.
Benjamin Price.....	39	"	4 "	65 S. Bond street.....	Coffee Roaster.

ENGINE COMPANY No. 6

Has in charge one steam fire-engine, two four-wheel hose carriages, two fire-extinguishers, five horses and harness, with all necessary equipments for service.

NAMES.	AGE.	POSITION.	TIME IN SERVICE.	RESIDENCE.	FORMER OCCUPATION.
Permanent Employees					
Matthew Mulligan....	46	Engineman...	13 years.	107 E. Eager street...	Machinist.
Robert J. Boyle.....	35	As't Eng'mn.	8 "	112 Hillen street.....	Machinist.
William Patterson....	28	Driver..	4 "	16 Watson street.....	Driver.
J. Oscar Healey.....	48	Fireman.....	23 "	180 E. Monument....	Carpenter.
Members at Call.					
Bernard Shaw.....	52	Captain	8 years.	142 N. Exeter street..	Stonecutter.
George Meinburg.....	41	Fireman....	12 "	24 N. Central avenue.	Barber,
James Gallagher.....	34	"	3 "	48 N. Exeter street....	Plumber.
Francis D. Kerr.....	43	"	15 "	336 E. Madison street.	Rigger.
John H. Cruse.....	51	"	4 "	121 Ensor street.....	Cigarmaker.
Lawrence Blake.....	38	"	12 "	109 N. Eden street...	Painter.
William Gordon.....	31	"	2 "	34 Jefferson street....	Stonecutter.

ENGINE COMPANY No. 7

Has in charge one steam fire-engine, two four-wheel hose carriages, two fire-extinguishers, four horses and harness, with all necessary equipments for service.

NAMES.	AGE.	POSITION.	TIME IN SERVICE.	RESIDENCE.	FORMER OCCUPATION.
Permanent Employees					
John J. McCoy	42	Engineman	10 years.	25 Wyoming street	Machinist.
Jacob Corns	31	As't Eng'mn.	4 "	Eutaw & Mulberry sts.	Machinist.
John Friedhoffer	35	Driver	10 "	88½ N. Howard street.	Carpenter.
William Morrow	34	Fireman	6 "	151 N. Eutaw street	Painter.
Members at Call.					
George H. Houck	55	Captain	22 years.	209 N. Eutaw street	Railroad Agent.
John Gildea	57	Fireman	24 "	216 W. Biddle street	Driver.
Joseph Lavender	38	"	11 "	79 Pearl street	Carpenter.
J. F. Cook	27	"	6 "	106 Mosher street	Carpenter.
John J. Houck	32	"	4 "	161 N. Paca street	Machinist.
Edward A. Sheeks	48	"	12 "	17 Druid Hill avenue.	Pianomaker.
Henry Walker	36	"	10 "	470 Lexington street	Painter.

ENGINE COMPANY No. 8

Has in charge one steam fire-engine, two four-wheel hose carriages, two fire-extinguishers, four horses and harness, with all necessary equipments for service.

NAMES.	AGE.	POSITION.	TIME IN SERVICE.	RESIDENCE.	FORMER OCCUPATION.
Permanent Employees					
Michael F. Walsh	32	Engineman	9 years.	524 Lexington street	Machinist.
John Conway	28	As't Eng'mn.	1 "	81 Arlington avenue	Machinist.
William J. Stewart	33	Driver	9 "	412 Mulberry street	Tin and Sheet-iron worker.
Members at Call.					
Edward C. Keyser	33	Captain	7 years.	123 Mosher street	Canmaker.
A. J. Walter	46	Fireman	12 "	587 Saratoga street	Cigarmaker.
Owen D. Burgess	46	"	12 "	493 Lexington street	Silverplater.
G. R. Chapman	51	"	12 "	369 Mulberry street	Shoemaker.
Frederick Johnston	40	"	8 "	483 Saratoga street	Carpenter.
Howard Scott	30	"	4 "	501 Lexington street	Bricklayer.
Lewis Cook	28	"	2 "	218 Pierce street	Stonecutter.
Charles Minton	30	"	4 "	6 Jasper street	Cigarmaker.

ENGINE COMPANY No. 9

Has in charge one steam fire-engine, one reserve steam fire-engine, two four-wheel hose carriages, two fire-extinguishers, five horses and harness, with all necessary equipments for service.

NAMES.	AGE.	POSITION.	TIME IN SERVICE.	RESIDENCE.	FORMER OCCUPATION.
Permanent Employees					
Daniel Rogers	37	Engineman	12 years.	306 E. Madison street.	Machinist.
Wm. Stanton	35	As't Engm'n.	6 "	222 Chew street	Machinist.
Charles P. Nelson	31	Driver	7 "	190 E. Pratt street	Carpenter.
James McDevitt	41	Fireman	12 "	360 E. Madison street.	Harnessmaker.
Members at Call.					
David Macaulay	57	Captain	23 years.	111 N. Broadway	Painter.
Solomon Uhlfelder	40	Fireman	12 "	403 E. Madison street.	Huckster.
Charley Fry	21	"	7 "	395 E. Madison street.	Huckster.
Charles Neilson	30	"	5 "	394 E. Madison street.	Bricklayer.
Lemuel Piercy	37	"	3 "	60 Jefferson street	Laborer.
Wm. Burrier	31	"	3 "	394 E. Madison street.	Laborer.
Thomas B. Rial	44	"	15 "	250 Chew street	Carpenter.

ENGINE COMPANY No. 10

Has in charge one steam fire-engine, two four-wheel hose carriages, two fire-extinguishers, four horses and harness, with all necessary equipments for service.

NAMES.	AGE.	POSITION.	TIME IN SERVICE.	RESIDENCE.	FORMER OCCUPATION.
Permanent Employees					
John Walsh	34	Engineman.	7 years.	588 W. Pratt street.	Machinist.
C. P. Kuhen	38	As't Engm'n.	4 "	134 S. Poppleton st.	Machinist.
George W. Thorp	33	Driver	4 "	14 Parkin street	Driver.
Members at Call.					
Wm. Ward	39	Captain.	10 years.	41 S. Calhoun street.	Carpenter.
Alfred Squires	36	Fireman	10 "	100 Washington ave.	Carpenter.
Jesse Keilholtz	38	"	10 "	382 W. Lombard st.	Mantelsetter.
Benjamin Seipp	30	"	3 "	80 Parkin street	Plumber.
Wm. Brady	29	"	1 "	134 Ramsay street.	Cigarmaker.
D. C. Weaver, Jr	36	"	3 "	461 Franklin street.	Painter.
Samuel Marker	33	"	3 "	16 Arlington avenue.	Carpenter.
George W. Smith	32	"	3 "	130 McHenry street.	Bricklayer.

ENGINE COMPANY No. 11

Has in charge one steam fire-engine, two four-wheel hose carriages, two fire-extinguishers, one steam fire-engine in reserve, four horses and harness, with all necessary equipments for service.

NAMES.	AGE.	POSITION.	TIME IN SERVICE.	RESIDENCE.	FORMER OCCUPATION.
Permanent Employees					
John Calder	37	Engineman	13 years.	256 Gough street	Machinist.
A. M. Minniegue	36	As't Eng'mn.	6 mont's.	309 Gough street	Machinist.
John Kelly	33	Driver	13 years.	310 Bank street	Driver.
Members at Call.					
Andrew Perry	56	Captain	22 years.	210 Gough street	Patternmaker.
H. R. Seippel	34	Fireman	9 "	135 Gough street	Barber.
James D. Daniels	44	"	14 "	116 S. Chester street	Scroll-sawyer.
R. V. Pittinger	35	"	4 "	112 Collington ave	Carpenter.
Andrew Gier	29	"	5 "	249 E. Lombard street.	Painter.
Joseph Kelly	40	"	1 "	91 Albemarle street	Driver.
Thomas Kane	33	"	1 "	338 Eastern avenue	Laborer.
Patrick Bradley	39	"	15 "	50 Fawn street	Carpenter.

ENGINE COMPANY No. 12

Has in charge one steam fire-engine, two four-wheel hose carriages, two fire-extinguishers, one fuel wagon, four horses and four sets of harness, with all necessary equipments for service.

NAMES.	AGE.	POSITION.	TIME IN SERVICE.	RESIDENCE.	FORMER OCCUPATION.
Permanent Employees					
Michael Lycett.....	37	Engineman..	11 years.	232 Battery avenue...	Machinist.
Thomas L. Atkinson...	34	As't Eng'mn.	3 "	159 Johnson street....	Machinist.
George D. Taylor.....	50	Driver.....	15 "	36 Fort avenue.....	Driver.
Joseph W. Moon.....	33	Fireman....	5 "	1 Lalope street.....	Laborer.
Members at Call.					
Wm. Schulte.....	29	Captain.....	4 years.	120 West street.....	Carpenter.
Thomas Fitzpatrick...	46	Fireman	4 "	82 Cross street.....	Timer.
Levin J. Broadwater..	36	"	9 "	62 Battery avenue...	Shipcarpenter.
Edward Klessell.....	31	"	2 "	348 S. Sharp street...	Gilder.
Benjamin T. Wirts...	43	"	15 "	36 Church street.....	Collarmaker.
Henry Seeback.....	32	"	9 "	364 S. Sharp street....	Laborer.
Beauregard Carter....	24	"	3 "	159 Hughes street....	Moulder.

ENGINE COMPANY No. 13

Has in charge one steam fire-engine, two four-wheel hose carriages, two fire-extinguishers, five horses and harness, with all necessary equipments for service.

NAMES.	AGE.	POSITION.	TIME IN SERVICE.	RESIDENCE.	FORMER OCCUPATION.
Permanent Employees					
John H. Deal	41	Engineman	12 years.	278 Myrtle avenue	Machinist.
John A. Bannon	40	As't Eng'mn.	6 "	117 Poppleton street.	Machinist.
Charles C. Clabaugh	26	Driver	2 "	30 Patterson avenue	Driver.
Members at Call.					
John Hoffman	36	Captain	6 years.	102 Druid Hill ave.	Canmaker.
Philip Bowen	32	Fireman	6 "	170 Pennsylvania ave.	Cigarmaker.
Laurence Pistel	34	"	11 "	307 Argle avenue	Cigarmaker.
Louis C. Campbell	35	"	4 "	2 Roberts street	Hay Dealer.
Wilbur Pierce	26	"	4 mos.	259 Argyle avenue	Moulder.
James Keyser	40	"	4 "	380 Myrtle avenue	China Packer.
William LaShone	37	"	11 years.	377 Argyle avenue	Upholsterer.
Wesley S. Lilly	38	"	12 "	231 Saratoga street	Carpenter.

HOOK AND LADDER COMPANY No. 1

Has in charge one Hayes' truck, two fire-extinguishers, one fuel wagon, four horses and harness, with all necessary ladders and equipments for service.

NAMES.	AGE.	POSITION.	TIME IN SERVICE.	RESIDENCE.	FORMER OCCUPATION.
Permanent Employees					
John P. Ward	35	Tillerman	12 years.	1 May street	Undertaker.
Henry Pierie	29	Driver	3 "	152 N. Front street	Driver.
John R. Farr	35	Ladderman	9 "	55 Harrison street	Driver.
George W. Haskell	38	Ladderman	8 "	42 N. High street	Carpenter.
Members at Call.					
William M. Dunn	28	Captain	6 years.	45 N. Front street	Collector.
John B. Keene	44	Fireman	18 "	287 N. Eden street	Carpenter.
James Disney	41	"	8 "	3 Thompson street	Painter.
John R. Batte	33	"	10 "	40 E. Lombard street	Bricklayer.
Frederick Oelman	23	"	3 "	125 German street	Blacksmith.
James L. Southcomb	34	"	9 "	22 N. Front street	Wireworker.
Joseph V. Dougherty	34	"	14 "	78 N. Front street	Wireworker.
Alex. D. Chrismer	37	"	7 "	187 N. Central avenue	Machinist.

HOOK AND LADDER COMPANY No. 2

Has in charge one Hayes' truck, two fire-extinguishers, three horses and harness, with all necessary ladders and equipments for service.

NAMES.	AGE.	POSITION.	TIME IN SERVICE.	RESIDENCE.	FORMER OCCUPATION.
Permanent Employees					
Charles Rolf	28	Tillerman	5 years.	47 Marion street	Boxmaker.
Thomas Montgomery	42	Driver	13 "	74 N. Paca street	Hostler.
John W. Blake	47	Ladderman	13 "	Howard & Saratoga sts	Machinist.
Members at Call.					
Frederick A. Marston	44	Captain	13 years.	117 Townsend street	Painter.
Thomas Wagner	41	Ladderman	15 "	6 Diamond street	Blacksmith.
Edward W. Windle	37	"	6 "	80 Amity street	Blacksmith.
Lewis Pistel	28	"	5 "	89 Penn street	Diemaker.
Frederick Brannan	34	"	4 "	266 Mulberry street	Harnessmaker.
Wm. H. Quigley	28	"	4 "	371 Mulberry street	Carpenter.
J. F. Schaefer	44	"	4 "	77 St. Peter street	Chinapacker.
Chas. Eichelberger	35	"	9 "	466 W. Saratoga street	Painter.
Thomas Strahler	24	"	2 "	74 N. Paca street	Tinner.
John Lynch	32	"	9 "	197 Ramsay street	Stonecutter.

HOOK AND LADDER COMPANY No. 3

Has in charge one truck, two fire-extinguishers, one fuel wagon, three horses and two sets of harness, with all necessary ladders and equipments for service.

NAMES.	AGE.	POSITION.	TIME IN SERVICE.	RESIDENCE.	FORMER OCCUPATION.
Permanent Employees					
John McClellan	49	Tillerman	13 years.	282 E. Pratt street	Sailmaker.
James E. Patterson	35	Driver	13 "	100 Gough street	Driver.
Charles Schoepplien	29	Ladderman	3 "	55 S. Regester street	Upholsterer.
Louis Locks	27	"	4 "	96 N. Ann street	Confectioner.
Members at Call.					
George W. Foxwell	36	Captain	13 years.	112 Bank street	Shipwright.
John A. Downs	35	Ladderman	13 "	410 Orleans street	Painter.
Andrew German	34	"	12 "	117 Fairmount avenue	Painter.
George Bosse	41	"	5 "	40 S. Castle street	Cooper.
Jesse Vickers	50	"	9 "	51 S. Ann street	Painter.
John Sauers	35	"	4 "	15 N. Central avenue	Cooper.
Wm. Burns	28	"	3 "	131 S. Regester street	Canmaker.

HOOK AND LADDER COMPANY No. 4

Has in charge two bank ladder trucks and one Hayes' truck, two fire-extinguishers, one hose carriage, one supply wagon, five horses and harness, with all necessary ladders and equipments for service.

NAMES.	AGE.	POSITION.	TIME IN SERVICE.	RESIDENCE.	FORMER OCCUPATION.
Permanent Employees					
James Gill	37	Tillerman	4 years.	29 Brune street	Moulder.
John G. Gill	54	Tillerman	24 "	202 W. Fayette street.	Painter.
George Bowers	31	Driver	8 "	278 Argyle avenue	Paperhanger.
Jacob Green	28	Ladderman	6 "	292 Chase street	Stonecutter.
Members at Call.					
James Kelly	32	Captain	4 years.	384 Calhoun street	Plasterer.
Henry C. Loane	30	Ladderman	6 "	178 Biddle street	Bricklayer.
Lewis Scheive	31	"	11 "	9 New street	Paperhanger.
Andrew Bilson	32	"	4 "	315 Argyle avenue	Plasterer.
Thomas H. Reip	34	"	3 "	232 Franklin street	Tinner.
John T. Sisson	34	"	3 "	80 Park avenue	Painter.
Wm. F. Clabaugh	36	"	8 "	297 Argyle avenue	Painter.
Charles Baker	31	"	4 "	16 Diamond street	Scalemaker.

REPORT

OF THE

SUPERINTENDENT

Police and Fire Alarm Telegraph.

REPORT.

BALTIMORE, January 1st, 1884.

J. MONROE HEISKELL, ESQ.,

Fire Marshal.

DEAR SIR:

In submitting my report of the alterations, extensions and improvements in this department during the year, 1883, it is a source of congratulation that we have passed through it without any serious loss or damage to either wires or machinery.

The principal changes made are as follows:

January 2d.—Moved pole corner Light street and Fort avenue—in way of curbing. 17th.—Put second size trip gong in residence of Captain Ward, of No. 10 Engine Company. 24th.—Run seventy-five pounds of new wire on Leadenhall street, in the neighborhood of the acid factories—the old wire being in such a corroded condition it had to be taken down; changed boxes 6, 12, 131, 123, 124, 121 and 131, from the sides of houses to poles. 27th.—All house-top circuits changed to poles as follows: Nos. 1, 3, 4, 5 and 14 boxes, independent, police, telephone and No. 2 alarm; also changed both sides of Nos. 3 and 5 box circuits, independent, police and marine hospital line from the west side of Charles street to east, to clear Baltimore and Ohio Telegraph wires.

No changes in February.

March 1st.—Put second size trip gong in residence of the Fire Marshal, No. 102 St. Paul street; used four poles, three 6-wire arms, eight 4-wire arms, one 6-wire fixture, fifty-seven glass insulators, four coils iron wire, sixty feet Kerite wire, half pound office wire; changed Circuits 13 and 14 and Water Board line, running them over all telephone wires. 26th.—Moved four poles on Preston street, between North street and the bridge, in way of curbing. 27th.—Moved pole twenty feet on Preston street, near the bridge, in way of sewer. 28th.—Put two 2-wire cross arms in place of broken ones on McHenry street.

April 5th.—Run wires and put gong in the Corn Exchange building, at their expense, Alarm Circuit No. 4. 14th.—Put up indicators at the following engine houses: Nos. 1, 2, 3, 4 and 6; truck houses Nos. 1, 2, 3 and 4; used eight pounds office wire, thirty 2-wire kleets, nails, screws, etc.

May 8th.—Put up new box at Crichton's distillery; used one hundred (100) pounds iron wire, one 4-wire arm, one T arm, two 2-wire fixtures, six glass insulators, four rubber hooks, 30 feet Kerite wire, forty feet plain No. 14 copper wire, one pound nails, two pieces gas pipe, etc. 12th.—Put 2-wire cross-arm in place of broken one on Pennsylvania avenue, near Preston street. 19th.—Took box 246 from Crichton's distillery and brought it to the Central Station.

June 14th.—Put up forty foot pole on German street, near Charles, in place of one cut down by order of

Chief Engineer, at "Seemuller's" fire; used five 6-wire cross arms and ten pounds iron wire.

July 7th.—New pole placed corner Arch and Saratoga streets, and changed wires from house-top to pole; used one 4-wire and one 2-wire arms, and thirty pounds wire. 12th.—Placed box 258 at "Horner's Factory;" used five 35-foot poles, twelve glass insulators, five 2-wire cross arms, one coil No. 9 wire, two corner irons, four rubber hook insulators, twelve feet Kerite wire, half pound office-wire, bolts, kleets, nails, etc. 16th.—Disconnected all indicators in engine and truck houses, by order of the Fire Marshal. 18th.—Reset two old poles on Marine Hospital Line that had rotted off. 19th.—Put 6-wire cross-arm in place of broken one corner Charles and German streets; put 2-wire cross-arm on pole corner Thames and Ann streets, old one broke. 31st.—Moved pole on Fremont street, near Fayette—in way of curb.

August 1st.—Put 2-wire cross-arm on pole corner of Wolfe and Pratt streets; also one on pole on Davis street, near Franklin, old ones broken. 18th.—Moved box 4, corner Calvert and Baltimore streets, in way of carpenters.

September 2d.—Reset pole on Preston street that had rotted off and fell down. 4th.—Put up new poles at the following places: One 45 and one 35-foot pole on Preston street, near the bridge; one 42 and one 38-foot pole on John and Wilson streets; two 35-foot poles on Foster alley, near Wilson street; one 45 and two 35-foot poles on McMechen street, between Eutaw Place and Bolton street; two 35-foot poles on Madison avenue, between Roberts and Wilson streets; one 45-foot pole

corner Fulton and Fayette streets; two 45-foot poles on Bentalou street, near McHenry; used eighteen 2-wire cross-arms, one hundred and twenty glass insulators, twenty pounds iron wire; changed the route of line from Park avenue to Foster alley, at request of property owners; eleven of the poles mentioned above were furnished by the telephone companies who have wires on them. 7th.--Put up new pole corner Charles street and Boundary avenue, and changed box from the side of house to pole; used one 2-wire cross-arm, two T arms, two pieces of gas pipe, one pound plain No. 14 copper wire, twenty pounds iron wire, one back board, bolts, nails, &c. 8th.--Put two 2-wire cross-arms, in place of broken ones, on Pennsylvania avenue; straightened box-pole corner Fayette and Bond streets. 12th.--Raised wires at following points for Oriole parade: Madison avenue and McMechen street, McMechen street and Eutaw Place (both sides), Eutaw and Franklin streets, Centre street and Plover alley, Centre street and Hargrove alley, and along Centre, Franklin and Calvert streets, Gay and Baltimore streets; used five pieces timber sixteen feet long, eight old cross-arms, twenty pounds iron wire, bolts, washers, etc. 24th.--Moved box 317 in Sun Office--in way of improvements; used twenty-five feet Kerite wire. 26th. Moved two poles on Marsh Market Space--in way of new pavement; used ten pounds iron wire to guy poles.

October 2d.--Put up pole corner Fremont and Pratt streets, that had been torn down by run-away horse; used one T arm, half a pound No. 14 plain copper wire, two pieces of gas pipe thirteen feet long, one back board, rubber hook insulators, etc. Also fixed up permanently

box circuits 11 and 12—along McMechen street and Eutaw Place, that had been torn down by the Oriole parade; used one T arm, twenty pounds iron wire, rubber hook insulators, etc. 9th.—Put one 4-wire cross-arm and two T arms on pole at No. 10 Engine house in place of rotten ones. 12th.—Put two 2-wire arms corner Eager and Forrest streets, and one 2-wire arm corner Greenmount avenue and Chase street, in place of broken ones. 13.—Put piece of scantling on pole and raised wires on Poppleton street, near Mount Clare Station; also took out slack, and used two 4-wire arms. 18th.—Put up 40-foot pole on German street, near South; used four 6-wire cross-arms, ten pounds iron wire, bolts, washers, etc. 30th.—Moved pole on Vincent alley—in way of new building; used ten pounds iron wire.

November 12th.—Reset pole on Hughes street, near Henry; rotted off and fell down. 20th.—Moved pole on Union Dock—in way of building. 30th.—Moved large gong in No. 3 Engine house and re-run wires.

December 3d.—Took down guy pole corner Holland and Aisquith streets. 4th.—Re-run wires at No. 7 Engine house; used two and a-half pounds No. 16 office-wire, kleets, nails, etc. 6th.—Run wires to and put gong in the residence of Captain Dunn, of No. 1 Truck Company; used forty feet old office-wire, seventy-five pounds No. 9 iron wire, five 4-wire cross-arms, two corner irons, twelve glass insulators, ten bolts, washers, nails, etc.

Lineman Kain also straightened up and put guy wires on a large number of poles, and trimmed trees along the lines. Considerable complaint has been made to

this department about trimming trees; in some instances the owners of property have threatened suit against the city. As I cannot approve of the cutting to pieces of fine shade trees that are an ornament to the street and often highly prized by the owners, I respectfully ask that poles of such size as the case may require be furnished this department so our wires can be raised above the trees and prevent such trouble in future.

To renew those that are becoming dangerous from age, and to make the improvements as suggested above, will necessitate the purchase of two hundred (200) new poles.

I must call your attention to the condition of the roof of the City Hall, which is gradually breaking under the great strain of our wires on the fixtures placed there, and which must be remedied at an early date. To do this properly, I would recommend the purchase of a forty (40) wire cable, to be run from the corner of Charles and German streets to the City Hall, and thence to the corner of Fayette and Gay streets. This will not only greatly lessen the strain, but will be a great protection to our wires from those of the telephone and telegraph companies in the immediate vicinity of the City Hall.

The immense increase of wires of telegraph, telephone and electric light companies during the past year render it imperatively necessary, in my opinion, that some measures should be taken by the Mayor and City Council to compel all telegraph wires to be placed under ground in the near future. The perfect net-work of wires in the business centre of the city, the unsightly poles on each side of nearly every street, and the con-

stant and increasing danger to the lives of our citizens in case of fire, call for immediate and urgent action.. In all the large cities the press and people are becoming alarmed, and their legislators have realized the fact that it is necessary to take steps in this matter, and have passed bills compelling all wires to be placed under ground by a certain time, and preventing the erection of new poles except in urgent cases.

I again call attention to the lack of protection to the property of our citizens through the scarcity of fire-alarm boxes. In many thickly-settled portions of the city the distance from box to box is at least a quarter of a mile; the time lost in getting to the box frequently allows a small fire to become dangerous. When the new system of telegraph was turned over to the city it had one hundred and fifty (150) alarm boxes; they have been increased since that time (1877) to one hundred and sixty-one (161)—an increase of eleven (11) in seven (7) years, four of these being put in service by private individuals, at their own expense, viz.:

Sun Iron Building, box 317.
Saint Sulpice Seminary, box 322.
Maryland Penitentiary, " 245.
Horner's Factory, " 258.

The number of fires in hotels, schools, public buildings and places of amusement throughout the country during the year, make it a duty to look after the protection of our people.

In several of my annual reports, I call attention to the great danger human life is exposed to, in case of fire in all buildings where large numbers of people congregate, namely—schools, churches, places of public amuse-

ment, large factories, etc., and where experience has taught us, an alarm of fire is generally accompanied by a panic. To prevent as far as possible this manifest danger to human life, should be one of the foremost endeavors of that branch of municipal government, whose duty it is to protect the community against loss by fire. Especially should some action be taken in the case of our public schools, where the children of our citizens are brought together in great numbers. The lessening of the danger above alluded to, should be regarded a most sacred duty. Promptness in getting to fires in building of this kind, ought to be assured by all possible means; and it is for this reason I have urged the necessity of placing alarm boxes in each of the public schools, giving them direct communication with the fire department.

Attention has been called, for several years back, to the condition of the telephone line to the Marine Hospital. This line was built about 1872, of very inferior material, the poles in many places being no thicker than an ordinary awning post; and it is now in such condition as to compel its being rebuilt or discarded. The poles have rotted off and been reset, time and time again, until it has become almost useless to attempt to repair them.

The machinery in the dome of the City Hall, used for striking "Big Sam" has been very unreliable during the year, and as it is very important to the firemen who live or work in the centre of the city, and who are warned of fires by this bell, I would recommend the entire renewal of said machinery as the most economical and reliable means of remedying the evil.

There has been little or no satisfaction since the first introduction of this striking machinery. There should be furnished this department one large sized gong, such as now in use in our engine houses, and one second size gong, to be used in case of breaking of any of those now in service. At present, if a gong in any of the engine houses breaks, I am compelled to take the gong out of one of the police stations and put in place of broken one, leaving the police station without means of getting alarm of fire except from engine house bells.

The following is an inventory of machinery and instruments in central station (City Hall):

1 three dial repeater.
2 automatic repeaters.
1 switch board.
30 galvanometers, in use.
3 lightning arrestors, in use.
26 call gongs on fire circuits.
25 relay magnets " "
5 Local registers " "
28 testing keys, three on independent.
2 old dial boxes, not in use.
5 Morse magnets " "
4 local magnets, " "
3 independent circuit magnets, not in use.
1 18-inch engine house gong, out of order.
2 galvanometers and one resistance box.
1 map of Baltimore city.
1 bell-striker, single dial.
1 clock regulator.
1 gong on police ckt. for testing.

Material in charge of Lineman Kain, and gongs in service:

15 large trip gongs in engine houses.
11 second size trip gongs.
45 stroke gongs.
9 coils No. 9 galvanized wire.
1 coil No. 10 " "
180 4-wire cross-arms.
33 2-wire " "
30 T arms.
4 kegs of spikes.
75 lbs. 5-inch spikes.
700 glass insulators.
550 bolts and washers.
7 good and four old shovels.
1 wire reel.
1 small pole wagon.
1 20-foot ladder.
1 kite tail burner and torch.
3 pike poles and one butt pole.
250 feet small rope.
250 feet Kerite wire.
2 saws.
2 monkey wrenches.
6 drawing knives, old.
1 3-inch auger.
5 Chisels, different sizes.
8 small files.
1 large vise.
1 grindstone.
1 pair cutting plyers.
1 pair gas plyers.

2 vises and straps.
1 single vise.
2 hand axes.
1 large axe.
1 brace.
24 bitts, different sizes.
1 pipe cutter.
6 bottles watch oil.
4 gallons linseed oil.
30 rubber hook insulators.
150 lbs. old iron wire.
25 lbs. old corner irons, and lot of old material not worth enumerating.

Material in charge of Batteryman Byrne:
8½ barrels blue stone.
1,200 new zincs.
75 coppers, out of lot of 100 just bought.
813 cells of gravity battery, in use.
88 cells prism Leclanche, "
1 copper scoop.
1 water pot.
100 glass battery jars.
50 cells of old Leclanche battery.
3 old local gongs.
5 old glass register covers.
30 lbs. old copper.
250 lbs. old zincs.
1 scale.
2 pieces sponge.

The following is a list of articles necessary for this department during 1884:

2 office diaries.
2 boxes register paper.
3,000 sheets paper, department heading.
200 new telegraph poles, different sizes.
100 2-wire cross-arms, with pins, painted.
50 6-wire cross-arms, with pins, painted.
3 gross screws, different sizes.
3 coils No. 10 galvanized wire.
15 pounds No. 16 office wire.
2 half-inch bitts, 20 inches long.
6 gimlets, different sizes.
50 porcelain knobs, with screws.
1 vise and straps.
1 pair small plyers.
2 dozen springs for gongs.
4 pike poles.
25 pounds white lead.
1 cant hook.
20 pounds small nails.
1 small drill, 12 inches long.
50 8-wire office brackets.
25 2-wire office brackets.
2 pounds double pointed tacks.
50 staples for gas pipe at boxes.
2 screw drivers, small.
20 back boards for boxes.
4 climbers' straps.

Material necessary for Battery Department:
30 barrels of blue stone.
500 new zincs.
700 coppers.
100 cells of prism Leclanche battery complete.

Alarms of fire passed through, as follows:

First alarms, 256.

Second alarms, 11.

Third alarms, 5.

I must return thanks to the members of the Police and Fire Departments for their kind assistance, and to the employees of this Department for their strict attention to their duties.

The force of this office is as follows:

Operators—H. P. Lucas, Alex. Crummer, F. L. McAleese, F. J. Connor.

Substitute Operator—William H. Bauer.

Lineman—Robert Kain.

Assistant Lineman and Batteryman, Thos. F. Byrne.

Respectfully,

CHAS. J. McALEESE,

Superintendent Police and Fire Alarm Telegraph.

APPENDIX.

FIRE MARSHAL'S OFFICE--CITY HALL,

BALTIMORE, January 4, 1884.

At my request, the Superintendent of Fire Alarm Telegraph has written the following enlargement of his views upon the importance of the telegraph cable mentioned in his report, and as it is not estimated for in our table, I would respectfully urge special legislation upon the subject. It would be a measure of a permanent nature, and not proper to be included in the expenses of the Department for the current year. I beg to call your special attention to it as a matter which he deems of such vital importance.

Very respectfully,

J. MONROE HEISKELL,

Fire Marshal.

BALTIMORE, January 5, 1884.

J. MONROE HEISKELL, ESQ., *Fire Marshal.*

DEAR SIR:—Since submitting my annual report, I have made inquiry as to the probable cost of cabling our wires from German and Charles streets to City Hall, and thence to Fayette and Gay.

The latest and most improved cable of forty (40) wire capacity, English gauge, No. 16 copper wire, served with Kerite tape around each convalution, two tapes on the outside, is quoted at one dollar and fifty-five cents per foot.

This change is very necessary, not only to save the roof of the City Hall, which is giving way under the great strain from the large number of our wires upon it, but also to protect them from the wires of the telegraph and telephone companies, which can be counted by the hundreds in this immediate vicinity.

It will require about three thousand feet of cable, and will cost about forty-eight hundred dollars. This amount seems large, but when it is understood there are forty wires, and three thousand feet of cable will contain twenty-two (22) miles of English gauge copper wire, with the best insulation known, it needs no further explanation.

We have now in operation twenty (20) box, four engine house alarms, Independent, Police and Telephone Circuits, and Marine Hospital line. They are all metalic except the two latter, making fifty-four wires connected with this office. This will leave all the spare wires necessary for the introduction of new circuits as the requirements of the Department may demand.

Respectfully yours,

CHAS. J. McALEESE,

Sup't Police and Fire Alarm Telegraph.

REGULATIONS

— OF THE —

Baltimore City Fire Department.

FIRE MARSHAL'S OFFICE—CITY HALL,

BALTIMORE, February 23, 1883.

To the Officers and Members of the

Baltimore City Fire Department:

In assuming charge of this Department I desire to call the attention of the officers and members to Section 5 of the Ordinance entitled "An Ordinance to provide for the appointment of a Fire Marshal, and to abolish the office of Fire Commissioners, and to vest in such Fire Marshal the functions of the Fire Commissioners of Baltimore City, under Article 20, of the Baltimore City Code of 1879," which reads as follows:

"And it will not be compatible with the proper discharge of his duties, for any officer or other member of the Fire Department, to act as judge, clerk or challenger, at any primary or general election, or to do more in a public way than to simply exercise his right of suffrage on any election day."

It is a wish long entertained by the citizens of Baltimore that this Department should be thoroughly divorced from politics, and I am at its head for this purpose, and shall lose no time in assuring the community that it can and will be done. I therefore take this method of notifying the officers and members of the Department that a violation of Section 5 of said Ordinance, when clearly established to my mind, shall be sufficient cause for the instant removal of the person or persons so violating it. The officers and men of this Department will not be permitted on general or primary election days to remain at the polls after having exercised their right of suffrage, or to solicit votes for any candidate or candidates at any of said elections under penalty of being dismissed the service.

I earnestly request all good citizens to aid me in carrying out the Ordinance upon this subject by promptly informing me of any violation of the same.

J. MONROE HEISKELL,

Fire Marshal.

ARTICLE I.

Duties of the Chief Engineer.

The Chief Engineer shall attend in the centre of the city all fires or alarms, fully equipped, and shall have the sole direction of the operations of the department. It shall be his duty to visit the several houses, and see that the houses, apparatus, horses, &c., are in proper condition, and the men at their posts, and should he find anything out of order, or any member derelict in his duty, he shall have authority to suspend him, but must at once report the matter to the Fire Marshal. All reports made to him by the officers, or any other matters that may come to his knowledge, shall be reported in writing to the Fire Marshal as soon as possible.

ARTICLE II.

Duties of the Assistant Engineers.

It shall be the duty of the Assistant Engineers to attend all fires or alarms, fully equipped, in their respective districts, or be subject to a fine of three dollars. They shall visit each house twice each day, morning and evening, and see that the houses, apparatus, horses, etc., are in good order, and the members at their posts, and shall make daily written reports of the same to the Chief. They shall have authority to suspend any member for misdemeanor, but must report the matter to the Chief as soon as possible.

In the absence of the Chief, the Assistant in whose distict the fire or alarm of fire occurs, shall have authority to exercise all the power granted to the former. In the absence of the Chief and Assistant of the district, the Assistant of the other district, if present, shall have command of the Department.

All orders received from the office must be given to the Captain in writing.

Superintendent of Machinery.

He shall visit the houses of the Department at least once in every three days, and see that the apparatus is in condition for service, shall superintend and assist in making repairs to the apparatus, shall attend all fires that occur from boxes in the business part of the city, and wear a uniform when on duty.

ARTICLE III.

Duties of the Captains.

It shall be the duty of the Captains to be present at all fires or alarms in their district, fully equipped. They shall visit their several houses twice each day, and see that the houses, apparatus, horses, and all things belonging thereto are kept neat and clean, and in order at all times for immediate use. In the absence of the Captain, the Engineman or Tillerman, as the case may be, shall

have charge and exercise his authority. They shall preserve good order and discipline in their respective companies at all times. They shall make monthly statements in writing of the condition of the houses, apparatus, horses, etc., with an estimated list of supplies needed for the ensuing month. They shall report in writing to the Assistant Engineer any dereliction of duty or violation of the rules by the members. They shall have the authority to suspend any member for cause, but must report the same to the Assistant Engineer at once.

In the absence of the Chief Engineer and both Assistant Engineers, the Captain first arriving on the fireground, shall have command and be obeyed accordingly. If a first alarm of fire be given from a station which his company does not attend, upon that alarm he shall proceed to his Engine or Truck-house, remain thereat thirty minutes, unless sooner called into service, or relieved by the recall signal, call the roll, note the absentees, and dismiss his firemen. The Captain shall recommend for appointment five substitutes for their respective companies as provided in Article IX, of the Regulations.

It shall be the duty of the Captains of the companies of the Department to read the Rules and explain them to the members on the pay day of each month.

ARTICLE IV.

Duties of the Enginemen.

It shall be the duty of the Enginemen to accompany their engines at all times to fires and alarms, remain with and operate the same. They shall give their entire time and attention to the Department, and do such repairs as may be allotted to them. They shall be on duty at their respective houses at all times, with the exception of meal hours, unless relieved by Substitute, who must be a person competent to perform the duty required of his principal, and who must be approved by the Captain, Assistant and Chief Engineers, prior to

leave of absence being given. Leave of absence for two hours or less may be given by the Captain, between the hours of sunrise and sunset, but for a longer time the application must be in the hands of the Assistant Engineer twenty-four hours before the time desired.

For absence from their engines during an alarm of fire, without order or permission, the fine shall be five dollars if the engine is not in service, and if in service he shall be dismissed from the Department. All apparatus used for the extinguishment of fires upon the premises of an engine company will be considered as in his charge, under the supervision of his Captain, and he shall be responsible to him for the safe keeping and effective condition of the same.

ARTICLE V.

Duties of the Assistant Enginemen.

The Assistant Enginemen and Houseman shall be on duty at all hours, except those allotted to meals, and shall discharge all the duties appertaining to their positions during the time the apparatus is in service. They shall keep the houses, hose and carriages in proper and cleanly condition, and their entire time and services shall be rendered to the Department. They shall drive the hose carriage going to and returning from a fire, and shall perform all duty connected with the firing of their engines, and assisting the Engineman as may be required. The carriages of the officers of the Fire and Telegraph Department shall be under their care at the several houses at which they are stationed.

Leave of absence may be granted on the same conditions as are prescribed in Article IV of these Regulations.

ARTICLE VI.

Duties of the Inspector of Horses, and Hostlers.

It shall be the duty of the Inspector to visit the houses of the Department once in every forty-eight

hours. He shall have control of the horses and harness, and see that the same are properly attended to.

The Hostlers shall have charge of and accompany the horses to all fires and alarms, and shall keep their horses, harness, stables, etc., in good condition and always ready for service, and shall be on duty all hours, except meal hours, and shall give their entire time and services to the Department.

Leave of absence may be granted on similar conditions as provided in Article IV.

ARTICLE VII.

Duties of the Tillermen and Housemen.

The Tillermen, in addition to their duties as laddermen of the truck companies, shall have charge of and keep in good order and condition their houses, trucks, ladders, etc., and shall have them at all times ready for service. They shall be on duty at all hours, except meal hours, and shall give their entire time and services to the Department.

Leave of absence may be granted on similar conditions as provided in Article IV.

ARTICLE VIII.

Duties of the Firemen and Laddermen.

It shall be the duty of each fireman and ladderman upon a first alarm of fire, provided his company responds thereto, to repair with all possible speed to the locality of the fire, report himself to his Captain, and perform such duties as may be required of him. If his company does not respond thereto he will proceed to his engine or truck house, or report on fire-ground to his Captain, and remain for thirty minutes unless sooner called into service or relieved by the recall signal.

In case of sickness or absence from the city, the Captain shall appoint in his place a substitute.

The Captain shall number each fireman from one to eight, and shall select four alternately, who shall re-

main in the house each and every night; any fireman absenting himself on his night, without having a substitute in his place, shall be fined $1.00. Each and every fireman must at all times be equipped on the fire-ground or be marked "absent." Absence from a fire or alarm during the month will subject the party to pay a fine of $1.00 for the first time, $2.00 for the second, $5.00 for the third, and the fourth, dismissal.

Each Fireman and Ladderman will be required to report at his respective house once in every twenty-four hours, and register his name and the time he reported.

ARTICLE IX.

Substitutes.

The Captains are authorized to name to the Marshal five suitable persons to act as Substitutes, who, when on duty, shall receive the same pay as firemen, to be deducted from the monthly wages of the party for whom they are acting, and who will not be required to report for duty unless the alarm is attended by the company to which they are attached.

The Fire Marshal will furnish suitable badges for the Substitutes, which must be worn at all fires or alarms. The Captain shall number each Substitute from one to five, and in case of the absence of any fireman he shall appoint them alternately. They shall have permission to wear the equipments of the company to which they are attached, and shall be subject to all the regulations provided for the government of the same. No Substitute can be assigned to duty in place of his principal during the time of a fire or alarm of fire.

No Substitute will be allowed to remain on duty for a principal more than ten days at any one time.

ARTICLE X.

House Regulations.

1.—No spirituous, vinous or malt liquors shall be

permitted upon the premises of any engine or truck-house in this Department.

2.—All political or religious discussion, profane swearing, or wrangling, is expressly prohibited.

3.—No smoking will be allowed in the sleeping rooms.

4.—Regular men or Substitutes, to whom beds are assigned, will be required to keep the same neat and clean, and will be expected to retire at or before 11 P.M., unless good excuse be given the Captain. The gas must be turned down at 10 o'clock P.M., after which no loud conversation upon the premises will be permitted.

5.—The Housemen are required to assist each other generally, when it can be done without interfering with their specific duties.

6.—Minors and loungers, not connected with the Department, will not be permitted upon any company's premises. The enginemen and tillermen will be held personally responsible for any violation of the rules of this Department that occurs on the premises, or in the vicinity thereof, unless the same is reported to the Captain as soon as possible.

7.—From April 1st to October 1st, the horses must be fed at or before 5½ o'clock A.M., and the hostlers will be required to finish breakfast and return to their duties at or before 7 o'clock A.M. One hour is allowed for meals.

8.—Horses and houses must be cleaned and be ready for service at or before 11 o'clock A.M.

9.—After 11 o'clock A.M., the housemen will appear in their uniforms, except where the regular performance of their several duties renders it impracticable.

10.—One hour shall be the allotted time for the housemen to procure their meals; any question of precedence shall be decided by the Captain, but so arranged that not more than one houseman be permitted to leave the house at a time, there being at all hours not less than two upon duty.

11.—Should an alarm of fire occur to interfere with

the foregoing time table, as much thereof as may be absolutely necessary will be considered for the time as suspended.

12.--Hose must be cleaned and aired every time they are used, and once a week if they have not been in service; they must not be allowed to lay in the sun; the hose must be replaced on the hose-carriage before 9 o'clock P.M.; the firemen to report at the engine-house at the hour designated by the Captain to perform that duty.

13.--All housemen are required to move or reside within four squares of their respective houses within thirty (30) days after their appointment and notification, or their several places will be declared vacant, unless otherwise directed by the Fire Marshal.

14.--It shall be the duty of the Captain to detail one fireman who shall be on duty from 9 o'clock P. M. until 6 o'clock A.M. to ring the bell, turn down the gas, and close up the house.

15.--The house must be washed out and the windows cleaned not less than once a month during the warm weather.

16.--No leave of absence shall be extended except by permission of the Chief Engineer.

17.--The members of the Department will not be allowed to take any part in primary or general elections, save to exercise the right of franchise.

18.--No alterations must be made to any of the property of the Department without first obtaining permission of the Chief Engineer.

19.--The members whose duty it is to sleep in the house must report there on Monday of each week, at 8.30 o'clock P.M., to be drilled by the Captain in hooking up the horses to the apparatus.

ARTICLE XI.

General Regulations.

1.--All the employees of this Department are strictly required in their intercourse with each other, social

and official, at fires and elsewhere, to observe a courteous demeanor. The Captain of each company shall at all times be addressed as such, and shall at fires address his men by their surnames.

2.—No houseman or fireman will be permitted to attend alarms of fire unless uniformed or equipped, except in cases of necessity, nor will they be permitted to frequent drinking-houses while wearing the uniforms of the Department.

3.—Any member employing a substitute and failing to pay him will be subject to dismissal.

4.—The men are required to move quickly and obey the orders of their officers promptly and without criticism.

5.—Within one minute of the striking of the station number upon the gong, each company will be ready to start, and, if required for service, must be out of the house within a minute after the first round has been struck.

6.—All requisitions, reports and other communications intended for the Chief Engineer or Fire Marshal must be made in writing by the Captain of the company, who shall promptly transmit the same through the Assistant Engineer to the Chief.

7.—Every member of the Department will be expected to observe rules of cleanliness, sobriety and good morals, and a neglect of these matters will be deemed and held as a good cause for dismissal by the Fire Marshal.

8.—Any member of the Department using profane, rough or ungentlemanly language to any citizen or member of the Department, shall be held as violating the rules, and shall be liable to suspension or dismissal.

9.—On visits of the superior officers to the engine-houses the members present will show their courtesy and respect due their official positions by removing their hats and rising from their seats, which latter will be returned by the officers.

ARTICLE XII.

Fire Alarm Regulations.

1.—When a first alarm is given, all members of this Department whose companies do not respond, will report to their respective engine and truck-houses prepared for duty, and if not relieved by the recall signal, or required for active duty during thirty minutes, will answer roll-call and be dismissed by their respective Captains.

2.—After a first alarm is given, and before the recall signal is struck, in case of a new alarm the two nearest engine companies and hook and ladder company will answer the box. Should two hook and ladder companies be in service at a first alarm, the remaining hook and ladder company will answer a new alarm from any other station in the city until the recall is struck from No. 1 Truck House.

3.—When the same station is struck a second time previous to the recall, it will be considered as a *second alarm*, and be answered accordingly. When another alarm comes from the station first struck, *after the recall*, it will be considered as a first alarm, and answered accordingly.

4.—After a second alarm has been given, and before the recall is received, in case of a new alarm, the two nearest engine companies and the unemployed hook and ladder company will answer the box.

5.—The recall signal is 2–9, followed by the number of the station from which the alarm is received, and will be understood as an order for dismissing the men attached to the companies awaiting special orders *connected with that station*, and for the resumption of such companies of their attendance upon their first alarm station list.

6.—When a second or third alarm has been given, the Captain of each engine company attending the preceding alarm or alarms, will immediately dispatch his engine horses for his spare hose carriage, and station

the same with the horses attached thereto near his engine until further orders. The Captain of each hook and ladder company on the ground will, in case of a second or general alarm, also dispatch his horses for his wood tender and unload them; the drivers of the engines shall take the tender and bring two loads each, the driver of the nearest engine taking the first turn, the drivers of the hook and ladder companies to take the tenders back to the houses.

7.—When the hose is laid, the companies in service will tie ropes across the streets so as to block them up, to prevent vehicles from passing over the hose.

8.—Upon the occurrence of a slight fire the first engine company upon the ground may lay out its hose, but none others without orders from the officer in command.

9.—After an engine has been in service, the Captain will report to the Chief Engineer the condition of the fire hydrant.

10.—In approaching corners, crossing gutters and going down grades, drivers must check the speed of their horses and the brakes must be used. All drivers and tillermen will be held pecuniarily responsible for any damage to horses, apparatus or other property, resulting from careless driving or steering. Any driver allowing his horses to go faster than a trot, will be fined $10.

11.—In returning from an alarm, the apparatus will not be allowed to proceed faster than a walk, the Captain and seven members will be allowed to ride on the hose carriage, seven besides the driver, and ten men on the trucks, nine besides the tillerman, when returning from fires, the men get off and assist the horses when going up the hills; the members that run to the fire to have the preference in riding home; one fireman will be allowed to ride on the engine with the engineman. The members of the engine companies will not be allowed to ride on H. and L. trucks, either going to or returning from alarms of fire, and they will not be

allowed to ride on the apparatus of other engine companies when the latter are carrying their regular number. When transferring from one house to another, the horses must go in a moderate trot.

12.—Horses must be exercised twice a week with the apparatus, and every other day without the apparatus, Sunday excepted, provided the weather is suitable. The duration of exercise shall be one hour without the apparatus, and one-half hour with the apparatus, and, if possible, always pursuing the same route, no portion of which shall be further than two squares from the house in which they are stationed, as may be designated by the Captain.

13.—All engines must be tried by draughting once every two weeks, unless in service during that time, and also tried in a similar manner after each service at fires. No more than thirty pounds of steam being allowed, except by special order.

14.—While an alarm is coming in one or more men previously selected by the Captain, shall count and announce the number without any interference from others, and unless the fire is known to be in the neighborhood, Bells must not be struck more than two blows, nor apparatus leave the house before one distinct round is received and understood.

15.—No engine shall leave the house unless accompanied by the hose carriage. In case of a fire occurring in the vicinity, the apparatus will not be allowed to leave the house until the alarm has been given.

16.—Upon the arrival of a hook and ladder company on the fire-ground, the tillerman shall as soon as possible light all his lanterns.

17.—After a second alarm has been given, or when a box is struck that calls for two hook and ladder companies, the unemployed hook and ladder company will answer all boxes, No. 2 Hook and Ladder Company from their house, No. 3 Hook and Ladder Company from No. 1 Hook and Ladder Company's house.

18.—It shall be the duty of the drivers who are first on the ground to meet the other companies and direct them to the nearest water. Any driver of an engine, hose carriage or truck, who shall drive over the hose when going home, or taking up hose, will be subject to a fine.

19.—When a third alarm has been given, unless engine companies 8 and 11 answer the box on the first, they will take the following positions and answer all boxes: No. 8 Engine Company at No. 1 Engine house, No. 11 Engine Company at No. 3 Engine house; the spare hose carriage to be taken from the houses before the apparatus is backed in.

20.—It shall be the duty of the Captains of the engine companies as soon as the hose is laid at fires to send two firemen to lay the hose close into the curb and tighten the couplings.

21.—Any officer or member of this Department who shall enter a drinking house whilst going to a fire with the apparatus, or returning from an alarm of fire to the engine house, will be subject to a fine by the Fire Marshal.

22.—The enginemen are not allowed to carry more than eighty pounds water pressure, except by order of a superior officer.

23.—No officer or member of the Department will be allowed to leave the city without putting on a substitute.

24.—When hose are used belonging to another company, they must be taken and placed on the hose carriage they were taken from.

25.—It shall be the duty of the Assistant Engineer of the district in which a fire occurs, to go in the buildings, with the pipes of the companies in service, and remain with them until they are ordered out.

26.—The Captains must remain with their respective pipes, where they are stationed, whilst the companies are in service.

27.—When the apparatus stops on the street, it must

be near the sidewalk, the hose carriage to be in the rear of the engine.

ARTICLE XIII.

Equipments.

The fire equipments are as follows:

Chief Engineer--A drab gum overcoat, a white leather fire hat, New York pattern, and white frontispiece, with "Chief Engineer" thereon.

Assistant Engineers--A drab gum overcoat, a white leather fire hat, New York pattern, with white frontispiece, having thereon the words "Assistant Engineer."

Captains--A white leather fire hat, New York pattern, with black leather front, having thereon the name of the office and number of the company, blue flannel shirt and black gum coat.

Firemen and Laddermen--A black leather fire hat, New York pattern, with black front, having thereon the number of the company, blue flannel shirt and black gum coat.

ARTICLE XIV.

Uniforms.

The undress uniform of the Chief Engineer and Assistant Engineers shall consist of a double-breasted sack coat of blue cloth, and vest and pants of the same material, and army hat.

The uniform of the Housemen shall consist of a single-breasted sack coat of blue cloth, and vest and pants of the same material, with the Department buttons, and a blue navy cap as above, the same to be worn at all times except when cleaning up. Straw hats in warm weather.

No officer or member will be permitted to visit drinking-houses, for the purpose of drinking, whilst wearing the uniform of this Department.

ARTICLE XV.

On Parade.

The uniform of the Chief and Assistants shall be the same as provided for in Article XIV.

The uniform of the Captain shall be the fire hat, gray frock coat, with cape of the same material reaching to the tip of the elbow, white metal buttons, with the letters B. C. F. D. thereon, black pants, black belts and buff gauntlets.

The uniform of the enginemen, assistant enginemen, tillermen and hostlers, shall be the same as the captain, except the hat, which shall be black.

The parade uniform of the firemen shall be black fire hat, grey coat, belt and buff gauntlets.

ARTICLE XVI.

POLICE AND FIRE ALARM TELEGRAPH.

Duties of Superintendent.

1.—The superintendent shall visit every engine house and police station, and critically examine their telegraph machinery, at least once in every forty-eight hours (except Sunday). Such visits to be made in the eastern and western districts on alternate days.

2.—He shall make a practical test, by turning in every alarm box in the Department, at least once in every sixty days, not more than nine boxes to be tested in any one day. Such tests to be made in the morning if practicable.

3.—He shall have personal supervision over the operators and linemen, see that all rules of the Department are enforced, and all necessary repairs to lines and machinery are properly and promptly made.

4.—He shall make a weekly report to the Fire Marshal of all the operations of his Department, together with the time and amount of materials used in repairs on constructions, etc.

Duties of Operators.

1.—The operator on duty shall have entire charge and control of the Police and Fire Alarm Telegraph, and no other person shall be allowed the use of, or access to any of the apparatus or appurtenances thereof, except by his order, unless especially authorized by the Superintendent or Fire Marshal.

2.—He shall keep the machinery and appurtenances of the central office clean and in proper condition. When trouble is discovered on any of the wires, he he shall locate it as nearly as possible and immediately summon the lineman and send him out to remove it. The time the trouble is discovered and all the attending circumstances must be minutely recorded in the diary, and also a special report made in writing to the Superintendent.

3.—He shall at all times be within reach of the instruments, and on no account leave the operating-room even for a moment, unless properly relieved. Sleeping while on duty will be considered an inexcusable violation of the Rules, and will be followed by dismissal from the service.

4.—The instant two distinct rounds of any fire-alarm signal have been received, he shall proceed to strike it out on all the wires. This rule must be strictly adhered to *without regard to the source from whence the alarm comes.*

5.—A second alarm will be sent out when a box rings in, preceded by the second alarm signal.

6.—A call for an additional engine or hook and ladder company will be sent out when the number of the box has been received, preceded by the second alarm signal, and followed by the number of the engine or hook and ladder company wanted.

7.—A third alarm will be sent out when a box rings in, preceded by the third alarm signal.

8.—When the recall signal has been received it will be sent out at once, followed by one round of the box from which it was received.

9.—Memorandum shall be made on the register paper, when the calls are recorded, at the beginning of each signal, the name of the signal, the date, hour, and minute, and the name of the operator on duty.

10.—Any break or mutilation of the register paper must be accompanied by a memorandum of the cause, on the paper, and a full account of the circumstances entered on the diary. The utmost care must be observed to prevent such breakage or mutilation.

11.—When the signal for placing flags at half mast, 9-9-9, has been received, preceded by the signal 2-9, three rounds of it will be sent out on all the wires. The recall will be received and sent out the same as the recall from a fire.

12.—The military signal, 9-5-6, is to summon the military to the armories in case of riot, or for other causes. This signal will be sent out only after a written order to that effect, signed by the Mayor, has been placed in the hands of the operator on duty.

13.—The call for the Chief Engineer or his assistants, or the Superintendent of Telegraph, or linemen, will be sent out three times, followed by the number of the station at which they are wanted, except for the City Hall, in which case only the call will be sent out. The officer called will answer 2-3.

14.—The signal for testing lines will be 2, 2, 2, followed by the signal of the person making the test.

15.—Alarms of fire, the military call and call for additional engine or hook and ladder companies will be sent out on all wires. Call for department officers or special calls will be sent out only on the circuit designated for that purpose.

16.—The operators are expected to make themselves perfectly familiar with all the calls and signals of the Fire and Police Department, as well as the numbers and locations of all the fire alarm stations, so that time may not be wasted by the necessity for referring to printed cards of instructions.

Duties of the Lineman and Assistant.

1.—The lineman shall, under the superintendent, have charge of all repairs, and repair and construction tools. He shall attend all second and general alarms of fire, to care for the telegraph property of the department. He shall make a written report to the superintendent, at the close of each day, of all repairs or other work done by him, and the quality of each kind of material used.

2.—The assistant lineman shall have charge of the batteries and battery room, and shall be held responsible for the proper condition of the same. He shall at other times assist in the repair and construction of lines when called upon.

General Rule.

A properly laid charge of any violation of the Rules of this Department, or of carelessness or neglect, or omitting to perform any of the duties assigned to any employee of this department, will be promptly followed by his suspension from duty until such charges shall have been investigated by the Fire Marshal.

ANNUAL REPORT

OF THE

CITY COLLECTOR,

TO THE

Mayor and City Council of Baltimore,

FOR THE

FISCAL YEAR ENDING DECEMBER 31, 1883.

REPORT.

TAX DEPARTMENT—CITY COLLECTOR'S OFFICE,

BALTIMORE, January, 2, 1884.

To the Honorable the Mayor
and City Council of Baltimore:

GENTLEMEN:

I have the honor to submit, for your consideration, a statement of the operations of this Department for the fiscal year ending December 31, 1883.

The amount received from all sources during the year was $3,878,804.96.

On the levy of 1879—present basis $230,743,872—the total collections have reached $99\frac{36}{100}$ per cent.

On the levy of 1880—present basis $236,509,875—the total collections are $99\frac{26}{100}$ per cent.

On the levy of 1881—present basis $241,946,534—the total collections amount to $98\frac{20}{100}$ per cent.

On the levy of 1882—present basis $244,177,093—the total collections amount to $91\frac{30}{100}$ per cent.

On the levy of 1883—basis $248,803,232—the collections from May to December 31, 1883, amount to 71 $\frac{43}{100}$ per cent. Deducting amount of Plant, $1,427,858, exempt from city taxation, makes the percentage collected, 71 $\frac{34}{100}$.

Table A shows the monthly collections of both city and State taxes for the past fiscal year, amounting in the aggregate to $4,313,960.74. Of this sum, the city's proportion was $3,878,804.96, and the State's $435,155.78.

Table B gives the basis of the various levies, on which collections have been made during the past year, with the amount collected on each levy; also the gross amount received for opening, closing and widening streets and alleys, and for paving streets, &c.

By this table it will be seen that there has been collected—

On account of taxes in arrears.....	$1,043,597 52
On account of levy of 1883.....	2,666,021 64
For opening, closing and widening streets	35,679 12
For paving and grading streets and alleys	133,506 68
Total collections for the city.....	$3,878,804 96

Table C shows the rate of tax per hundred dollars, and the various items of the several levies from 1878 to 1883, inclusive.

Table D is an exhibit of the monthly receipts on the several levies from 1878 to 1883, inclusive; also, of the receipts for opening and closing streets and alleys, and for paving streets and alleys.

Table E exhibits the amounts collected during the past year, in accordance with the rates as shown in Table C, divided into separate items forming each levy; also, the amount of interest received on account of taxes in arrears, and the amount of discount allowed for prompt payment of taxes of 1883.

Table F shows the basis, the basis collected upon, and the percentage collected within each year on levies of 1878, 1879, 1880, 1881, 1882, to December 31st of each year; also, on the levy of 1883, from date of levy to December 31, 1883, inclusive; and, on the levy of 1882 to December 31, 1883.

Table G shows the percentage collected monthly, from January 1, 1883, to May, 1883, on the levy of 1882; and on the levy of 1883, from May to December 31, 1883, inclusive.

Table H gives the receipts for paving streets and alleys, during the past year, amounting to $133,506.68.

Table I gives in detail the receipts for opening, closing and widening streets and alleys, from January 1, 1883, to December 31, 1883, aggregating $35,679.12.

The system of allowing taxes to remain unpaid for three and four years after the levy has been made, has prevailed here for some years, but does not exist, I believe, in any other city in this country. It is unwise for the city's interest, and highly prejudicial to the tax-payer, entailing heavy charges for interest and bailiffs' fees. With the approval of the committee of Ways and Means of the last Council, I have urged, the past year, the collection of two years' back taxes, 1880

and 1881, which enabled the committee to make last year's levy ten cents in the $100—*less* than would have been otherwise required, viz.:—$1.50 instead of $1.60, which latter would have been necessary to meet the appropriations, had the old custom been adhered to, of collecting a single back year, just in time to save the taxes from being barred by four years' limitation.

Regarding the basis of back taxes to be collected from, a larger per centage of back taxes was collected last year than has ever been done before in this department in any single year, and that too without oppressing the poorer classes, for whom a proper consideration has been had, and to whom, on application, reasonable extensions have been granted. In proof of this, it is gratifying to find, that though two years' back taxes have been enforced, less property has been sold during the year than for many previous years. If the back taxes are thus gradually brought up, without working a hardship on the tax-payer, the result in the near future would be most favorable to him, and also to the city. The tax-payer would then be able to pay his bill of the current year, and get the discounts *off*, instead of having added *on* the heavy charges which the law authorizes to be made on delinquents. The large number who are now delinquents would then become prompt payers, and the city would be able to calculate with more certainty on its receipts. With proper discounts during the year, and penalties after December 31st, ninety-five per cent. of the levy could be realized during the year, instead of about seventy-two per cent. as at present.

The Ways and Means committee estimated to receive from back taxes during the past year $1,017,000; the amount actually received, as per table B, was $1,043,597, showing an excess over their estimate of $26,597. This is the first time for many years, if ever, that the receipts of back taxes have exceeded the amount estimated for by the committee.

A year ago the Court of Appeals decided that the four years' limitation, which bars the collection of ordinary taxes, does not apply to taxes for paving streets. I found on the books of this department about $35,000 of uncollected paving taxes, running back to 1875, all supposed to be barred by limitations. Of this amount I have collected over $27,000, and the Circuit Court has decided in favor of the city for a claim of over $7,000, which has been carried by the parties to the Court of Appeals.

The appropriation I asked for, and received, from the last Council, to be expended in costs of ratification sales, where the city had been the purchaser of property at tax sales, has enabled me to make deeds to the Mayor and City Council of several lots so bought, years ago. The law requires the Comptroller, to whom I handed the deeds, to sell this property at public auction, to the highest bidder for cash, within 30 days of receiving the deeds. The city thus gets back its outlay, on which it has been losing interest for years, and the property again becomes part of the taxable basis of the city. I respectfully ask a further appropriation for the same object, that all these back matters, lying open for so many years, may be closed up, to

the evident interest of the city in getting back its money, and adding to the basis of taxation.

We ought to have a map, or series of maps, dividing the city into blocks, defining accurately the dimensions of the lot, name of owner, whether improved or not, and description of improvement. Each lot being numbered could easily be found and referred to, and no real property could thus escape taxation. Such plats would go far towards the correction of some of the evils we daily feel, in the need of renumbering the houses of the city, some having no number, sometimes duplicates are found on the opposite sides of the same square; then again duplicates in adjoining squares, etc., all causing unavoidable errors in this department, to the annoyance of the tax-payer and loss to the city. In advertising property for sale, these numbers could be used referring to the lots, instead of the long description of a survey, which advertised for four weeks in two newspapers, is very costly to the tax-payer. A sample of such a map has been already made by the "Baltimore Title Company," showing very much what is needed, and, if extended to cover the whole city, would be of immense value.

That company, with its large data to work from, and its well-known ability and accuracy of detail, would no doubt perform such a work very satisfactorily and at a comparatively moderate cost. In the event of a reassessment of the city, which is greatly needed, such plats would be very valuable to the assessors, simplifying their labors, aiding them in accuracy, and helping to accomplish the work in much shorter time.

In the absence of the much needed entire change of our laws on assessment—taxation and collection—there should, at least, be passed by the present Legislature, an Act requiring that all deeds, before being recorded, should have endorsed on them, by the collector, that all arrears of taxes and assessments on the property conveyed, have been paid. This would advise this department of the ownership of property, and greatly facilitate the collection of taxes in arrears.

In this same connection I would suggest, that trustees or receivers should be required to report their appointment, as such, to the collector, thus saving the department from ignorantly adding costs and expenses, where none are necessary.

Some other matters of minor detail I propose to suggest to the committees, to be acted on by the Council, looking to a more efficient administration of this department.

Respectfully submitting the above,

I have the honor to be,

HENRY S. TAYLOR,

City Collector.

TABLES.

TABLE A.

Total City and State Taxes received from January 1, 1883, to December 31, 1883, inclusive.

1883.	CITY.	STATE.	TOTAL.
January.....	$448,527 11	$56,810 67	$505,337 78
February ...	122,414 66	12,417 33	134,831 99
March	94,455 58	7,751 32	102,206 90
April	99,384 05	10,325 90	109,709 95
May	1,795,397 33	180,350 47	1,975,747 80
June.....	183,269 95	20,660 40	203,930 35
July.....	155,570 20	19,070 08	174,640 28
August	150,249 50	30,223 26	180,472 75
September...	168,622 57	20,707 52	189,330 09
October.....	152,142 01	18,594 26	170,736 27
November ..	192,373 00	20,378 13	212,751 31
December ...	316,399 00	37,866 44	354,265 44
	$3,878,804 96	$435,155 78	$4,313,960 74

TABLE B.

Recapitulation of Taxes collected from January 1, 1883, to December 31, 1883, and on Levies of 1878, 1879, 1880, 1881, 1882 and 1883.

	Basis.	Rate per $100.	Tax.	Discount.	Net Tax.	Interest.	Total, including Interest and Discount.
1878.							
Personal.	$2,697	190	$51 24	.....	$51 24	$12 56	$63 80
1879.							
Real.....	161,797	150	2,426 96	.....	2,426 96	481 98	2,908 94
Personal.	114,451	150	1,716 76	.....	1,716 76	336 22	2,052 98
1880.							
Real.....	10,158,776	137	139,175 26	.....	139,175 26	18,373 87	157,549 13
Personal.	648,025	137	8,877 95	.....	8,877 95	1,352 63	10,230 58
1881.							
Real.....	16,450,128	137	225,366 71	.....	225,366 71	20,704 01	246,070 72
Personal.	615,871	137	8,437 42	.....	8,437 42	719 19	9,156 61
1882.							
Real.....	39,613,642	137	542,706 97	.....	542,706 97	4,304 48	547,011 45
Personal.	4,971,198	137	68,105 42	.....	68,105 42	447 89	68,553 31
	$72,736,585				$993,864 69	$46,732 83	$1,043,597 52

1883.												
Real.....	$131,931,251	150	1,978,968	77	$42,677	78	1,936,290	99	.....		1,978,968	77
Personal.	45,803,525	150	687,052	87	42,937	79	644,115	08	.....		687,052	87
	$177,734,776				$85,615	57	$3,577,170	76	$46,732	83	$3,709,619	16
	$250,471,361											
Opening, closing and widening streets and alleys.....											35,679	12
Paving streets and alleys.....											133,506	68
											$3,878,804	96

TABLE C.

Rate of Tax per Hundred Dollars.

	1878	1879	1880	1881	1882	1883
Police Department.....	26	23	20	22	24	24
Certain Expenses.....	10	8	9	10	8	8
Public Schools.....	17	18	14	17	16	18
City Poor	7	5	6	9	6	8
City Direct	67	69	53	55	53	58
Miscellaneous Stock.....	52	23	31	24	30	30
Opening Streets.....	11	4	4	..	..	4
	190	150	137	137	137	150

TABLE D.

Monthly Receipts of Taxes on the several Levies from 1878 *to* 1883, *inclusive, for Opening and Closing Streets and Alleys, and Paving Streets and Alleys from January* 1, 1883, *to December* 31, 1883, *inclusive.*

	1878.	1879.	1880.	1881.	1882.	1883.	Opening Streets.	Paving Streets.	Total.
January	.....	$433 94	$22,918 06	$19,592 20	$401,514 21	.....	$1,664 15	$2,404 55	$448,527 11
February	$63 80	476 71	23,593 81	12,078 84	58,273 82	.....	14,454 37	13,473 31	122,414 66
March	.....	787 57	31,826 37	9,724 08	21,903 26	....	1,413 05	28,801 25	94,455 58
April	.....	1,642 54	46,882 32	12,032 69	22,816 12	.....	534 84	15,475 54	99,384 05
May	.....	730 44	23,443 50	7,801 18	15,628 74	$1,724,546 18	4,357 22	18,890 07	1,795,397 33
June	.....	58 82	9,205 21	13,307 53	15,796 40	131,319 35	380 88	13,201 76	183,269 95
July	.....	.....	1,912 99	26,639 13	16,760 44	107,113 83	255 41	2,888 40	155,570 20
August	.....	.....	2,845 47	31,472 76	13,847 04	92,792 21	28 00	9,264 02	150,249 50
September	.....	.....	363 77	66,020 83	11,289 66	87,849 07	393 44	2,705 80	168,622 57
October	.....	643 12	2,139 66	24,641 81	10,623 81	104,320 46	2,112 36	7,660 79	152,142 01
November	.....	150 26	1,785 13	20,846 05	9,952 68	139,926 50	9,480 97	10,231 41	192,373 00
December	.....	38 52	863 42	11,070 23	17,158 58	278,154 04	604 43	8,509 78	316,399 00
	$63 80	$4,961 92	$167,779 71	$255,227 33	$615,564 76	$2,666,021 64	$35,679 12	$133,506 68	$3,878,804 96

TABLE E.

Division of Taxes received from January 1, 1883, to December 31, 1883, inclusive.

	1878.	1879.	1880.	1881.	1882.	1883.	TOTAL.
Police Department	$7 01	$635 37	$21,613 61	$37,545 21	$107,003 62	$412,864 98	$579,669 80
Certain Expenses	2 70	220 99	9,726 13	17,065 99	35,667 89	137,621 67	200,305 37
Public Schools	4 58	497 25	15,129 54	29,012 18	71,335 79	309,648 76	425,628 10
City Poor	1 89	138 11	6,484 12	15,359 38	26,750 91	137,621 67	186,356 08
City Direct	18 07	1,906 13	57,276 05	93,863 00	236,299 65	997,756 92	1,387,119 82
Miscellaneous Stock	14 02	635 37	33,501 07	40,958 37	133,754 53	516,081 22	724,944 58
Opening Streets	2 97	110 50	4,322 69	.....	.....	68,810 85	73,247 01
	$51 24	$4,143 72	$148,053 21	$233,804 13	$610,812 39	$2,580,406 07	$3,577,270 76
Interest	12 56	818 20	19,726 50	21,423 20	4,752 37	.....	46,732 83
Discount	.....	.....	.....	.....	.....	85,615 57	85,615 57
	$63 80	$4,961 92	$167,779 71	$255,227 33	$615,564 76	$2,666,021 64	$3,709,619 16
Opening, Closing and Widening Streets and Alleys	.....	.....	.....	.....	.....	.....	35,679 12
Paving Streets and Alleys	.....	.....	.....	.....	.....	.....	133,506 68
							$3,878,804 96

TABLE F

Of percentage collected within the year on Levies of 1878, 1879, 1880, 1881, 1882 to December 31st; also on Levy of 1883 from date of Levy to December 31st, 1883; also on Basis of 1882 to December 31st, 1883.

	BASIS.	BASIS COLLECTED UPON.	PER CENT.
1878	$249,265,595	$151,982,867	60.97
1879	244,043,181	160,128,883	65.61
1880	241,980,638	169,896,579	70.21
1881	247,230,189	184,901,640	74.79
1882	246,234,056	179,574,015	72.93
1883 to Dec. 31, 1883	248,803,232	177,734,776	71.43
1882 to Dec. 31, 1883	244,177,093	224,158,855	91.80

TABLE G

Showing the Percentage collected monthly from January 1st, 1883, to May, 1883, on Levy of 1882, and on Levy of 1883, from May to December, 1883, inclusive.

	MONTHS.	BASIS COLLECTED UPON.	PER CENT.
1882. $244,177,993	January	$29,307,606	12.03
	February	4,232,402	1.73
	March	1,582,948	.65
	April	1,640,797	.67
1883. $248,803,232	May	114,969,745	46.21
	June	8,754,624	3.52
	July	7,140,922	2.87
	August	6,186,148	2.49
	September	5,856,605	2.35
	October	6,954,697	2.79
	November	9,328,433	3.75
	December	18,543,602	7.45
		$177,734,776	71.43

Basis, 1883 ..... $248,803,332
Less amount of Plant exempted .. 1,427,858

$247,375,274

Amount collected on $177,734,776—equal to 71.$^{8}/_{10}$ per cent.

TABLE II.

Summary of Receipts of Paving Streets and Alleys from January 1st, 1883, to December 31st, 1883.

Paving Burke street	$ 241	58
" Howard "	28,487	19
" Calvert "	2,143	95
" Charles "	20,474	98
" Hanover "	4,609	36
" Park "	250	92
" Broadway	2,971	26
" Marshall street	573	67
" Liberty "	8,094	00
" Valley "	10	28
" Gay "	14,121	29
" McKim "	1,728	85
" Ensor "	3,972	91
" Arch "	366	86
" Bloom "	805	91
" Chapel "	793	71
" Monroe "	1,136	54
" Mount "	227	40
" Eagle "	496	18
" York "	207	89
" Federal "	80	92
Amount carried forward	$91,795	65

TABLE H—Concluded.

Amount brought forward	$91,795 65
Paving Cuba street	42 35
" Bond "	2,422 06
" Eutaw Place	20,092 08
" East Falls avenue	7 64
" Harlem "	4,820 82
" China alley	357 16
" Stoddard alley	70 87
" Addison "	1,048 09
" Bruce "	1,825 20
" Morton "	557 19
" Vincent "	587 51
" Norris "	388 92
" Lemmon street	48 88
" Biddle "	3,610 99
Rekerbing Pennsylvania avenue	82 40
Interest on paving	5,748 87
	$133,506 68

TABLE I.

Summary of Receipts for Opening, Closing and Widening Streets and Alleys, from January 1, 1883, to December 31, 1883.

Opening	John street	$	616 70
"	Robert street		152 50
"	Carey street		2,782 42
"	Covington street		3,613 01
"	Cathedral "		8,330 41
"	Luzerne "		6,406 49
"	McElderry "		2,764 66
"	Mosher "		1,766 19
"	Federal "		181 94
"	Lanvale "		100 13
"	Oliver "		94 50
"	Holbrook "		661 03
"	Gold "		6,736 99
"	Tennant "		1,396 49
"	Cuba "		44 16
"	Biddle "		31 50
			$35,679 12

ANNUAL REPORT

OF THE

Commissioners for Opening Streets

TO THE

Mayor and City Council of Baltimore,

FOR THE

FISCAL YEAR ENDING DECEMBER 31st, 1883.

REPORT.

OFFICE OF THE

COMMISSIONERS FOR OPENING STREETS—CITY HALL,

BALTIMORE, January 1, 1884.

To the Honorable the Mayor and
City Council of Baltimore:

GENTLEMEN:

We have the honor to submit to you a statement of the operations of this department from January 1st, 1883, to December 31st, 1883, inclusive.

The following list comprises the streets and alleys opened during the above stated time; also, the amount of damages, expenses and benefits, and the cost to the city for each and every street, &c., as follows:

STREETS, &c., OPENED AND CLOSED DURING THE YEAR 1883.

STREETS, &c.	Damages.	Expenses.	Benefits.	Amount on the City.
Holbrook street, from Hoffman street to Point lane	$3,023 32	$384 94	$901 96	$2,506 30
Arch street, from Baltimore street to German street	4 00	285 43		289 43
Mosher street, from Gilmor street to Fulton avenue	16,500 00	577 65	9,708 52	7,369 13
Jones' Falls, under Ordinance No. 121, approved October 21, 1882	22,723 83	1,111 50		23,835 33
Barclay street, from Chase street to Biddle street	5,500 00	234 25	3,343 75	2,390 50
Biddle street, from Barclay street to North street	4,953 00	243 86	1,562 50	3,634 36
Cuba street, from Hull street to Andre street	1 00	281 32	282 32	
Twenty foot alley, from Hoffman street to Gelston alley	1,980 36	324 30	1,045 62	1,259 04

Biddle street, from Barclay street to Greenmount avenue	12,886 20	524 15	9,668 64	3,741 71
Edmondson avenue, from its present western terminus to the western city limits	5,970 18	771 55	6,741 73	
Federal street, from Cannon street to the eastern city limits	12,591 80	465 09	7,337 95	5,718 94
Patapsco street, from Fort avenue to Ostend street	2,483 91	248 10	1,705 67	1,026 34
Jones' Falls, under Ordinance No. 89, approved October 10, 1883	21,703 18	556 59		22,259 77
	$110,320 78	$6,008 73	$42,298 66	$74,030 85

ITEMS OF EXPENSE ACCOUNT.

Per diem of Commissioners and Clerk.....	$1,440 00
City Surveyor.....	2,998 14
Magistrate.....	26 00
Stationery, &c.....	52 50
Publishing Legal Notices.....	1,287 09
Builders Estimates.....	205 00
	$6,008 73

STREETS, ALLEYS, &c., NOW IN PROCESS OF OPENING AND CLOSING.

Ordinance No. 87, approved May 5, 1880—To close Lawson's lane, between North avenue and Druid Hill avenue.

Ordinance No. 99, approved May 11, 1880—To open Hoffman street, from St. Paul street to North street.

Ordinance No. 136, approved June 4, 1880—To open Clement street, from Laurence street to Hull street.

Ordinance No. 72, approved May 16, 1881—To open Patapsco street, from Monument street to Boston street.

Ordinance No. 84, approved May 23, 1882—To close Point lane, between Ensor street and North avenue.

Ordinance No. 96, approved May 25, 1882—To open Morton alley, from John street to Hoffman street.

Ordinance No. 97, approved May 25, 1882—To open Oliver street, from Greenmount avenue to North street.

Ordinance No. 100, approved June 6, 1882—To close Point lane, between Oliver street and Caroline street.

Ordinance No. 105, approved July 15, 1882—To open Cannon street, from North avenue to Oliver street.

Ordinance No. 108, approved September 1, 1882—To open Hoffman street, from Eden street to Bond street.

Ordinance No. 118, approved October 19, 1882—To close Fourth street, between Fort street to the property lately owned by Alex. Gould, Sr.

Ordinance No. 62, approved May 12, 1883—To open Calhoun street, from Baker street to Cumberland or Gilmor streets.

Ordinance No. 63, approved May 12, 1883—To open Cannon street, from Baltimore street to Oliver street.

Ordinance No. 85, approved August 28, 1883—To open Wolfe street, from Monument street to North avenue.

Ordinance No. 94, approved October 20, 1883—To close Kirby's or Dorsey's lane, from Lanvale street to the property of the Harlem Stage Company.

Ordinance No. 96, approved October 20, 1883—To open Mount street, from Presstman street to Baker street.

Ordinance No. 97, approved October 20, 1883—To open an alley ten feet wide, between Eden and Spring streets.

Ordinance No. 97, approved October 20, 1883—To open an alley ten feet wide, between Central avenue and Spring street.

Ordinance No. 97, approved October 20, 1883—To open an alley nine feet nine inches wide, between Eden and Spring streets.

Ordinance No. 97, approved October 20, 1883—To open an alley ten feet wide, between Caroline and Spring streets.

Ordinance No. 97, approved October 20, 1883—To open an alley ten feet wide, between Caroline and Dallas streets.

Ordinance No. 97, approved October 20, 1883—To close an alley ten feet wide, between Eden and Spring streets.

Ordinance No. 104, approved October 20, 1883—To open Townsend street, from Charles street to Maryland avenue.

Ordinance No. 105, approved October 20, 1883—To open Parrish alley, from Mulberry street to Franklin street.

Ordinance No. 111, approved November 1, 1883—To open a street at or near the intersection of Cross and Belt streets.

Ordinance No. 113, approved November 1, 1883—To close Carey street at North avenue.

Ordinance No. 114, approved November 2, 1883—To widen Orleans street, from Forrest street to Central avenue.

ORDINANCES REPEALED.

Ordinance No. 84, approved August 28, 1883—To repeal Ordinance No. 25, approved April 23, 1878, to condemn and open John street, from Gay street or Belair avenue to the eastern city limits.

Respectfully submitted,

JOHN B. WILLIAMS,
MATT. W. DONAVIN,
JOHN McWILLIAMS,
Commissioners.

ROBERT F. GREEN, *Clerk.*

FIFTY-FIFTH ANNUAL REPORT

OF THE

BOARD OF COMMISSIONERS

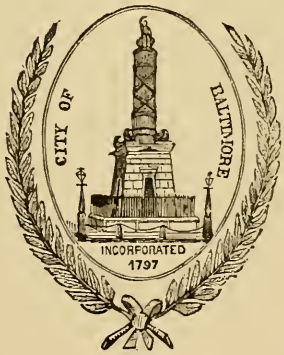
OF

PUBLIC SCHOOLS,

TO THE

MAYOR AND CITY COUNCIL OF BALTIMORE,

FOR THE YEAR ENDING DECEMBER 31, 1883.



BALTIMORE:
PRINTED BY JOHN B. PIET & CO.,
CITY PRINTERS.

Board of Commissioners of Public Schools

FOR 1883.

OFFICERS:

PRESIDENT.....JOHN T. MORRIS.
SECRETARY.....HENRY M. COWLES.
SUPERINTENDENT.....HENRY A. WISE.
ASSISTANT SUPERINTENDENT.....CHARLES G. EDWARDS.

MEMBERS OF THE BOARD:

WARD.		TERM EXPIRES.
1.	FRANCIS J. RUTH	1885.
2.	GEORGE H. BUDEKE	1887.
3.	*WM. C. ATKINSON	1884.
4.	†TIMOTHY MALONEY	1886.
5.	‡WM. M. IVES	1885.
6.	JOHN F. HANCOCK	1884.
7.	ROBERT H. SINCLAIR	1886.
8.	JOHN T. FOLEY	1887.
9.	JOSHUA PLASKITT	1887.
10.	JOHN T. MORRIS	1886.
11.	JOHN P. POE	1884.
12.	BENJAMIN PRICE	1885.
13.	HARRY H. GARRIGUES	1887.
14.	F. G. CONNOLLY, M.D	1884.
15.	J. WM. KINES	1885.
16.	WM. E. ADDISON	1886.
17.	H. B. ROEMER	1884.
18.	§THOMAS H. GRAHAM	1886.
19.	JAMES W. BOWERS	1887.
20.	CALVIN J. KING	1885.

*Resigned Septeimber 18th. On December 4th the Board elected John B. Wentz to represent the Third ward.

†Resigned October 30th. On December 4th the Board elected Wm. M. Ives to represent the Fourth ward.

‡Resigned December 4th. The Board on the same day elected James Boyle to represent the Fifth ward.

§Elected February 28th in place of Jacob Schonkel, resigned.

STANDING COMMITTEES.

1. *BALTIMORE CITY COLLEGE.*

Messrs. Hancock, Connolly, Sinclair, King, President and Superintendent.

2. *FEMALE HIGH SCHOOLS.*

Messrs. Poe, Atkinson, Roemer, Ives, Price, Budeke, President and Superintendent.

3. *GRAMMAR SCHOOLS.*

Messrs. Bowers, Price, Kines, Plaskitt and Ruth.

4. *PRIMARY SCHOOLS.*

Messrs. Graham, Foley, Addison, Ives, Maloney and Assistant Superintendent.

5. *PUBLIC SCHOOLS.*

Messrs. Budeke, Roemer, Bowers, Ruth and Garrigues.

6. *NORMAL SCHOOL.*

Messrs. Sinclair, King, Bowers and Superintendent.

7. *COLORED SCHOOLS.*

Messrs. Plaskitt, Hancock, Poe, Ruth, Foley and Superintendent.

8. *BOOKS.*

Messrs. Price, Poe, Atkinson, Connolly, Plaskitt, President and Superintendent.

9. *FURNITURE.*

Messrs. Ives, Garrigues, Kines, Plaskitt and Graham.

10. *MUSIC.*

Messrs. Roemer, Atkinson, Kines, Garrigues and Bowers

11. *DISCIPLINE.*

Messrs. Addison, King, Budeke, Ives, Maloney, President, Superintendent and Assistant Superintendent.

12. *ACCOUNTS.*

Messrs. Kines, Roemer, Ives, Atkinson and Sinclair.

13. *EXPENDITURES.*

Messrs. Roemer, Bowers, Kines, Connolly, Graham and President.

14. *EXAMINATIONS.*

Messrs. Atkinson, King, Hancock, President, Superintendent and Assistant Superintendent.

15. *BI-WEEKLY REPORTS.*

Messrs. Foley, Graham and Sinclair.

16. *CONFERENCE.*

Messrs. Garrigues, Price, Maloney, Ruth and Addison.

17 *BUILDINGS.*

Messrs. Ruth, Maloney, Connolly, Foley, Garrigues, President and Superintendent.

18. *PRINTING.*

Messrs. Maloney, Foley and Addison.

19. *HEALTH.*

Messrs. Connolly, Hancock and Graham.

20. *DRAWING.*

Messrs. King, Poe, Budeke, Hancock and Addison,

21. *INTESTATES' ESTATES.*

Messrs. Poe, Price and Budeke,

REPORT

OF THE

Board of Commissioners of Public Schools

OF BALTIMORE.

OFFICE OF COMMISSIONERS OF PUBLIC SCHOOLS,

January 1st, 1884.

To the Honorable Mayor and
City Council of Baltimore:

Another year in the history of the public schools of our city has passed, and it is again the duty of the Board of Commissioners to make a proper report of their transactions during the past year, and furnish such information as will enable the public to properly estimate the work, condition and wants of the schools.

It is true that a year is but a short period in the history of our school system—which is the growth of more than half a century; and, yet, it may be possible, even in that short time, to accomplish such results, as

will indicate the progress and success of those principles, which underlie all systems of free public instruction.

We wish to know whether our schools are as good, or better, than they were the previous year, and with that view, we examine their work, and try to ascertain the results. We believe that growth is necessary to prevent decay; and, if it appears that the schools have stood still and no material progress has been made, then there is reason to believe that there is some obstacle in the way which must be removed.

If, however, our investigation shows that the number of teachers and pupils has largely increased, and that energy and zeal and faithful application prevail, and that there is evidence of moral and intellectual growth, then it may fairly be presumed that the system will be satisfactory and successful.

Applying these principles to the work and condition of our schools during the past year, we find much that is encouraging for the present, and hopeful for the future. There have been periods in their history when their success was endangered by the prejudice and power of their enemies; but that time has passed, and now our citizens are earnest in their efforts to sustain and develop our system of education which is conferring such inestimable benefits on our community.

They recognize the value of general intelligence, and believe that the true policy of government is to establish and support by proper taxation such system of free education as will produce direct and general benefit

to the whole people, and this can best be accomplished by furnishing instruction in every department of useful knowledge, from the lowest to the highest grade.

The accompanying reports of the Superintendents will show the kind and amount of work which has been done during the past year, and will doubtless satisfy the public that every possible effort is made for a full and satisfactory development of our system of public schools.

SCHOOL STATISTICS.

The whole number of schools under the charge of the Board during the past year was 121, containing 37,546 enrolled pupils, classified as follows:

1	Baltimore City College	633
2	Female High Schools	1,004
19	Male Grammar Schools	4,901
20	Female Grammar Schools	5,757
30	Male Primary Schools	8,296
30	Female Primary Schools	8,225
5	Public (English-German) Schools	3,869
14	Colored Schools	4,861

These schools have been conducted by 855 teachers, with an average daily attendance of 31,601, whilst the whole number of pupils who have received instruction during the year has been 48,876.

The average attendance and the number on roll are ascertained from the last quarterly reports from all the schools at the close of the scholastic year; but the actual number of pupils in the schools during the year

is much larger than is represented by the enrollment at its close.

The number of pupils to a teacher in Baltimore City College was 42; in Female High Schools, 41; in Grammar Schools, 41; in Public Schools, 42; in Primary Schools, 46; and in Colored Schools, 47, which is as many as any teacher can successfully control and instruct.

Number of white pupils	32,685
Number of colored pupils	4,861
Number of pay pupils	12,350
Number of free pupils	25,196
Number of male teachers	83
Number of female teachers	772

The increase in the number and attendance of pupils during the past year has been unusually large, the enrollment being 1,879, and the average attendance being 2,423, more than during the previous year.

The percentage of attendance in all the schools has been 84, ranging from 92.8 in Western Female High School to 79. in the Colored Schools, as follows:

Western Female High School	92.8
Baltimore City College	92.5
Public (English-German) Schools	91.75
Eastern Female High School	91.
Male Grammar Schools	87.
Female Grammar Schools	85.2
Male Primary Schools	82.9
Female Primary Schools	80.4
Colored Schools	79.

This attendance is better and more satisfactory than during the previous year, and compares favorably with the public schools of other cities.

Irregular attendance of teachers or pupils must necessarily interrupt the progress and interfere with the success of a school, and every possible effort should be made to correct the evil.

The cost per capita of all the schools for current expenses was $17.3, and of the several grades as follows: Baltimore City College, $55.4; Female High Schools, $31.3; Male Grammar Schools, $22.6; Female Grammar Schools, $17.5; Public Schools, $15.6; Male Primary Schools, $13.6; Female Primary Schools, $13.2; Colored Schools, $13.4.

The average salary of the officers and teachers during the past year, was $615, which is much less than in other cities, and so low that no one could reasonably ask for a further reduction of the present schedule.

The number of pupils of non-resident parents was 284, and the amount received from them for tuition and use of books was $4,337.46, as follows:

Baltimore City College	40	$1,425 48
Female High Schools	13	368 00
Grammar Schools	141	1,859 20
Primary Schools	66	452 78
Public Schools	21	228 00
Colored Schools	3	4 00
	284	$4,337 46

The number of pupils of this class was 45 greater than in 1882, but the amount received was $73.64 less; the falling off in receipts being in the Female High Schools and Grammar Schools, whilst there has been a small increase in the other departments.

FINANCIAL.

The accompanying report of the Committee on Accounts furnishes full information with reference to the receipts and expenditures during the past year.

An appropriation of $649,401.93 was made by the City Council for the current expenses of the schools for 1883, of which amount $649,398.71 were expended, leaving a small balance to the credit of this department.

Although the appropriation was not as large as the estimate, yet, by the exercise of rigid economy, the current expenses of the schools were paid without violating the existing law, which requires each department to keep within the limit of the appropriation.

This rule was adopted by the city for the purpose of preventing excessive and improper expenditures by any of its departments, and has probably sometimes effected that result. It is, of course, right that those in authority should adopt all reasonable measures for the reduction of taxation consistent with a proper and liberal support of the several departments.

But, whilst this general principle is correct, it would be very unjust and unfair to expect or require any

department to successfully carry on its work and meet the public demand without adequate means. Public sentiment does not require that the rate of taxation shall be so low as to prevent a fair and liberal appropriation for all the departments which aid in developing the material interests of the city. As population increases the wants of the people become more numerous, and the annual cost of supplying these demands must necessarily increase. A rate of taxation which was sufficient to pay the annual expenses of the city ten years ago will not produce a revenue sufficient for its present requirements. This principle applies to every department of the city government, but to none with more force than that of public instruction, in which there is an annual increase of teachers and pupils, and a corresponding increase of expenses.

No proposition would seem to be clearer than that which every individual learns in private life, practically demonstrating that with increasing family comes increased expenses; and yet there are persons in official positions who seem to think that though the number of teachers and pupils does annually increase, yet the same yearly appropriation ought to be sufficient for the support of the schools. They seem to forget that every additional teacher and pupil involve an increased outlay for salary, and books, and furniture, and other incidental expenses, and that new schoolhouses are required for their comfort and health; or, if they do know these facts, they are indifferent to the existing wants of the schools, and refuse to furnish the proper and necessary appropriations for them.

RECEIPTS.

The total receipts from all sources for the current expenses during the past year were as follows:

From City Collector, taxes	$425,628 10
State Treasurer, for White Schools..	124,425 22
" " for Colored Schools.	19,468 48
White pupils for use of books.....	46,370 99
Colored pupils for use of books....	73 00
John F. Plummer, interest on legacy.	129 59
	$616,095 38

The amount received from city taxes was $48,177.03 more, and from the State Treasurer $24,396.18 less, than during the year 1882. The amount received from pupils for the use of books is annually diminishing, it being $565 less than during the previous year.

The amount paid by the city to the State for its school tax of 10 cents on every $100 was	$308,161 63
And the amount received by the city from the State for its proportion of this tax was only	143,893 70
Excess paid by the city	$164,267 93

This fund, which is paid to the State for the support of the public schools, arises from a tax of 10 cents on each hundred dollars of taxable property throughout the State, and is afterwards apportioned and distributed to the Boards of Commissioners of Baltimore city and the several counties, in proportion to their population between the ages of five and twenty years. It constitutes an important source of income for the support of

the public schools of the counties, but compels the city to pay annually a much larger sum than it receives as its proportion of the fund.

EXPENDITURES.

The amount expended by the Board for current expenses of the schools, was $649,398.71, and by the Inspector of Buildings for new houses and repairs, was $18,573.19, as follows:

WHITE SCHOOLS.

Salaries of officers and teachers		$471,308 60
Rents and ground-rents		26,285 58
Heating apparatus and repairs		9,819 42
Books and stationery		38,272 53
Fuel		17,964 03
Furniture		5,549 97
Repairs and cleaning of houses		5,350 36
Printing, supplies and incidentals		9,526 48
		$584,076 97

COLORED SCHOOLS.

Salaries	$53,726 45	
Rents and ground-rents	3,684 75	
Heating apparatus and repairs	1,187 20	
Books and stationery	3,463 31	
Fuel	2,132 76	
Furniture	56 50	
Repairs and cleaning houses	576 99	
Printing, supplies and incidentals	493 78	
		$65,321 74
Total current expenses		$649,398 71

Amount brought forward		$649,398 71
Expended by Inspector of Buildings.		
New building	$8,575 26	
Repairs of old buildings	9,997 93	
		18,573 19
Total expenses of the schools, 1883		$667,971 90

The system of receipts and expenditures adopted by the Board has heretofore been thoroughly examined, and fully approved by the Committee of City Council on Public School Accounts, who reported that "the rules of the Board on the subject are wise and ample, and they find that the accounts of the School Board are complete, satisfactory and well-kept."

In this connection it may be well to repeat what we have heretofore said with reference to the subject of expenditures of the money appropriated for the use of the schools.

All contracts for the erection of new buildings, or the repair of old ones, are made by the Inspector of Buildings, and all payments on account of the same, are made by that officer, with the approval of the Mayor.

All bills for current expenses of the schools are paid by the City Comptroller, and all fees for the use of books are received by the Secretary, who promptly returns the same to the City Register.

All the necessary supplies, such as books, furniture, stationery, fuel, are furnished upon satisfactory contracts, which are awarded to the lowest responsible bidder, after due notice and proper competition among those seeking for said contracts.

No member of the Board can be interested, directly or indirectly, in any contract for supplies to the schools, and not a dollar can be collected or paid by him on account of any expenses. A double supervision is thus exercised over the finances of this department, and every possible protection and guarantee are given for the faithful management and proper expenditure of any appropriations that may be made for the use of the schools.

The Board knows no better plan in the interest of judicious economy, but if any can be suggested which will accomplish more satisfactory results, it will be cheerfully adopted.

ESTIMATE FOR 1881.

The estimate for current expenses is $685,000, of which $600,000 is for white schools, $70,000 for colored schools, $10,000 for the Manual Training School, and $5,000 for evening schools.

Salaries of officers and teachers	$480,000
Rents and ground-rents	29,000
Books and stationery	39,000
Heating apparatus	10,500
Furniture	7,000
Fuel	18,500
Repairs and cleaning houses	6,000
Printing, supplies and incidentals	10,000
Colored Schools	70,000
Manual Training School	10,000
Evening Schools	5,000
	$685,000

The estimate is about $35,000 in excess of the amount expended during the past year, but cannot be diminished without injury to the schools.

The Committee on Accounts has carefully examined the condition and wants of the several departments, and has estimated as near as possible to the actual requirements of the schools. These estimates are based upon the actual expenditures of last year, with proper addition for the usual increase of teachers and pupils, and not upon any fictitious basis with a liberal allowance for deductions by the Committee of Ways and Means.

The estimate has necessarily been increased by the cost of the evening schools, which have been opened during the year, and also of the Manual Training School, which will be organized and opened, in pursuance of the ordinance directing the Board to establish this school.

The estimated increase in number of pupils will require the appointment of probably not less than forty new teachers, which will considerably increase the amount required for salaries, independent of the outlay of the usual supplies for the new pupils.

We hope, therefore, that the entire amount will be appropriated, so that we may be able to satisfactorily and successfully conduct the schools during the year.

SCHOOL BUILDINGS.

The number of buildings now occupied by the schools is 68, of which 62 are owned by the city and 6 are rented, and the estimated value of those belonging to the city is $1,200,000. Of the above-mentioned buildings owned by the city, 1 is occupied by Baltimore City College, 2 by Female High Schools, 15 by Grammar Schools, 25 by Primary Schools, 6 by Grammar and Primary Schools jointly, 5 by Public Schools, 1 by Colored High and Grammar School, and 7 by Colored Primary Schools.

Rented houses are seldom fit for school use, as they are generally the basements of churches or old dwellings, without sufficient light, air or ventilation.

In addition to these objections, the rent is always high, and the amount annually paid is greater than the interest on the sum which would be sufficient to erect new and suitable houses.

It certainly would be for the interest of the city and the benefit of the schools if a sufficient appropriation was annually made for the erection of new buildings, until the existing want was fully supplied, and thus dispense entirely with the use of rented houses.

During the past year the Inspector of Buildings was authorized to erect a new building on the site of the old one, at the corner of Bond and Jefferson streets, for the use of Grammar Schools No. 11. The new building was promptly commenced at the close of the schools in July last and will be completed during this year, and

ready for occupation at the opening in September, and in the meantime these schools are occupying rented buildings on Broadway and on Fayette street.

Additional ground has been purchased adjoining the lot now owned in fee by the city, and the new house will be commodious, and will furnish the facilities which have been so long needed for these schools.

The building on Carrollton avenue now occupied by Grammar Schools No. 15 is insufficient in size to accommodate the large number of pupils now in attendance. It was erected more than twenty years ago, when the school population in that part of the city was much less than at this time, and was probably intended for not more than half the number of children now crowded in it. The location is desirable, the teachers are efficient and the schools are popular, and there ought to be no further delay in furnishing additional accommodations, either by enlarging the present building or the erection of a new one.

When the appropriation of $15,000 was made for a new building at the corner of Charles and Ostend streets, for the use of Public School No. 2, we then said that it was probable that within twelve months after the house was completed and occupied it would be necessary to apply for an additional appropriation for its extension.

The building was completed last year, and already it is so crowded as to be uncomfortable, and many applicants have been refused admission for want of room. It is now necessary to have an addition

made to the building, and an appropriation of about $10,000 will be necessary for the purpose.

The great increase in the number of pupils in the Western Female High School has crowded the building so that some of the teachers are without separate class-rooms; and, unless there is a reduction in the number, it will be necessary, at an early period, to enlarge the present building, or to divide the school, and erect a new one in the northern part of the city.

The urgent request for more room in this, as well as other buildings, is based upon the fact that there is not proper seating capacity for the number of pupils. Many class-rooms contain twice as many children as ought to be in them, and this serious evil cannot be remedied without increased accommodations.

The Board will probably be compelled, as a sanitary measure for the protection of the health of teachers and children, to adopt the rule which exists in other cities, which fixes the seating capacity of every school-building upon a basis of sufficient floor space and cubic air space for each pupil, and excludes all beyond the number thus ascertained.

This rule may be an inconvenience to parents and children, as it will necessarily exclude many who are now in the schools, but it will be an ultimate benefit, and compel the erection of a sufficient number of school-houses to comfortably accommodate all who are entitled to receive their education in the public schools without injury to their health.

In a recent report to the City Council with reference to the condition of school buildings in this city, Dr. Chancellor, Secretary of the State Board of Health, says: "We do not appreciate sufficiently the magnitude of the evils produced by children breathing frequently a vitiated atmosphere, because the ultimate results are generally remote; but repeated exposures are sure to induce or develop a tendency to disease, especially of a pulmonary or nervous character, and to undermine slowly the firmest health. The languor, debility, loss of appetite, difficulty of breathing, cough, nervous irritability, and chronic affection of various kinds among pupils and teachers, are the natural fruits of exposure, day after day, to an atmosphere constantly becoming more impure from the vitiated breaths of many persons, and rendered still more unfit for respiration by dust and minute particles floating in it, tending to irritate the already inflamed and sensitive membrane which encloses the air-cells of the lungs." This is also the testimony of many other distinguished physicians who have devoted much time to the hygienic condition of public schools, and the warning should not be disregarded.

When new houses are erected, the true policy is to build them sufficiently large, not only for the pupils then in attendance, but also to provide ample room for the necessary increase in the future.

If this plan was adopted, it would be more economical for the city, and more beneficial for the schools, and it is hoped that the experience of the past in this respect will bring wisdom in the future.

The report of the Superintendent shows the bad condition of several buildings occupied by the primary schools, and urges the erection of new houses for their use. Nearly two-thirds of all the pupils in the schools are in the primary departments, and they are certainly entitled to receive the same attention, and enjoy like facilities with those in the more advanced grades.

Liberal appropriations should also be made to the Inspector of Buildings for repair of school buildings.

There is necessarily much to be done by reason of the daily wear and tear, and if he refuses to make the required repairs for want of the necessary means, the schools will suffer great inconvenience, and often the health of teachers and pupils will be seriously impaired.

It is hoped, therefore, that he will receive the full amount of his estimate for this department.

INDUSTRIAL EDUCATION.

During the past few years there has been a growing complaint throughout the country that the instruction given in the public schools has been so exclusively mental as often to unfit the pupils for manual labor and the practical duties of life.

If this charge be true, then certainly it is the duty of those who control the schools to so modify the existing systems of education as to enable the pupils to unite proper manual training with mental instruc-

tion, and thus to endeavor to accomplish the best results and gratify the public demand.

In accordance with these views, and for the purpose of ascertaining the practical benefits resulting from this new system of parallel instruction, the Board requested permission to establish one or more special schools for instruction in manual training, and in response to this request the following ordinance was adopted:

An Ordinance to empower the Board of Commissioners of Public Schools of Baltimore City to establish a School for Manual Training.

[Approved October 20, 1883.]

SECTION 1. Be it enacted and ordained by the Mayor and City Council of Baltimore, that the Board of Commissioners of Public Schools of Baltimore City be and they are hereby authorized and directed to establish in the city of Baltimore, in some convenient locality, as near the centre of the city as possible, a School for Manual Training, under such name or title as said Board shall select.

SEC. 2. And be it further enacted and ordained, that said school shall be open to the children of the citizens and *bona fide* residents of the city of Baltimore, and that the admission to said school shall be regulated by the law now existing for the admission of pupils to the public schools of the city of Baltimore, except in so far as changed by this ordinance.

SEC. 3. And be it further enacted and ordained, that the age and qualifications for admission to said school shall be fixed and prescribed by said School Board; provided, that the fee for the use of tools and materials for pupils, who are the children of residents or citizens of Baltimore, shall not exceed one dollar each per scholastic quarter.

SEC. 4. And be it further enacted and ordained, that pupils from other places may be admitted to said school upon such terms and conditions and upon payment of such fees as said Board shall prescribe.

SEC. 5. And be it further enacted and ordained, that this ordinance shall take effect from the day of its passage.

The oldest and most successful Manual Training School in this country is in St. Louis, and though not connected with the public school system of that city, yet its work and results have been so satisfactory that the Board determined to establish one in this city on the same general plan.

They will, however, differ in two respects, the former being a department of the Washington University of St. Louis, and supported entirely by private gifts and endowments specially contributed for that purpose, whilst the school established in Baltimore will be a part of the public school system, and be maintained by annual appropriations of the city.

It would be impracticable to introduce a manual training department in all the schools, both on account of the expense and the impossibility of successfully doing the required work among boys in the grammar schools, most of whom are too young, and do not possess the necessary physical strength.

Our plan will be to establish a school near the central part of the city, place it under the charge of a competent director and well-qualified instructors, furnish it with the necessary books and tools, and then receive boys of suitable age and capacity from all parts of the city.

Public sentiment favors the view that it is practicable to unite mental and manual instruction, and the results elsewhere prove that they may be simultaneously given with positive advantage to both.

The effect will be to create and foster a higher appreciation of the value of intelligent labor among the pupils of the schools, and to fit them to become skillful workmen, which will not only be of great personal advantage to themselves, but also will produce the most beneficial influence in the community.

It is hoped that this school will secure public favor and approval, and receive official encouragement and liberal appropriations for its support.

The following statement of the *object* and *course of study* of the school was adopted by the Board, and conforms in many respects to the language and plan of the school at St. Louis:

OBJECT.

The object of the school is as follows: Instruction and practice in the use of tools, and such instruction as may be deemed necessary in mathematics, drawing, and the English branches of a high school course. The tool instruction, as at present contemplated, shall include carpentry, wood turning, pattern making, iron chipping and filing, forge work, brazing and soldering, the use of machine shop tools, and such other instruction of a similar character as may be deemed advisable to add to the foregoing from time to time, it being the intention to divide the working hours of the students, as nearly as possible, equally between manual and mental exercises.

The Baltimore Manual Training School differs from the City College in omitting from its required studies

foreign and ancient languages, in giving prominence to mechanical drawing, and particularly in affording scientific instruction and actual practice in the care and use of tools.

COURSE OF STUDY.

The following course of study is proposed, subject to whatever changes experience may dictate:

First Year.—Arithmetic, Algebra, English Language, History, Physiology, Physical Geography, Freehand and Mechanical Drawing.

Shopwork—Carpentry, Wood Carving, Wood Turning, Pattern Making, Proper Care and Use of Tools.

Second Year.—Algebra, Plane Geometry, Physics, Mechanics, History, Literature, Geometrical and Mechanical Drawing.

Shopwork—Forging, Welding, Tempering, Soldering, Brazing.

Third Year.—Geometry, Plane Trigonometry, Bookkeeping, Literature, Political Economy, Civil Government, Mechanics, Chemistry, Machine and Architectural Drawing.

Machine Shop Work, such as Fitting, Turning, Drilling, Planing, etc., Study of Machinery, including the Management and Care of Steam Engines and Boilers.

Throughout the course, about one hour per day will be given to drawing, and about two hours per day to

shopwork. The remainder of the school day will be devoted to study and recitation. Before graduating, each pupil will be required to construct a machine from drawings and patterns made by himself. A diploma will be given upon graduation.

ADMISSION.

Candidates for admission must be at least fourteen years of age, and must present sufficient evidence of good moral character. They must pass a satisfactory examination in reading, spelling, writing, geography, English composition, and the fundamental operations of arithmetic as applied to integers, common and decimal fractions, and denominate numbers. Ability to use the English language correctly is especially desired. Boys fourteen years of age, who are members of the City College, or pupils in the first grade of a Grammar or "Public School," will be admitted without examination upon the recommendation of their Principal.

EXPENSES.

The fee for the use of books, stationery, tools and material will be at the rate of one dollar per quarter for each resident pupil. Free permits may be granted by the Committee, when necessary, upon application of the parent or guardian.

The charge to non-resident pupils will be $12.50 per quarter.

GENERAL.

The school does not teach trades. Its aim is more comprehensive—it lays the foundation for many trades, and at the same time recognizes the value of intellectual discipline.

It is not assumed that every boy who enters this school will be a mechanic. Some will find that they have no taste for manual arts, and will turn into other paths—law, medicine or literature. Some, who develop both natural skill and strong intellectual powers, will push on through the Polytechnic School into the higher realms of professional life, as engineers or scientists. Others will find their greatest usefulness as well as highest happiness in some branch of mechanical work into which they will readily step when they leave school. All will gain intellectually by their experience in contact with *things*. The general result will be an increasing interest in manufacturing pursuits, more intelligent mechanics, more successful manufacturers, better lawyers, more skillful physicians, and more useful citizens.

When this provision was made for the boys in our schools, it was also thought desirable to furnish some practical instruction to the girls adapted to their domestic wants, and the Board therefore directed the introduction of sewing into the girls' schools.

In a previous report, the Board expressed its high appreciation of the voluntary instruction in sewing which had been given by some of the teachers in the

schools. The experiment was successful, and a general wish for its continuance was expressed by parents and children.

Similar instruction is given in the public schools of other cities as a part of the regular course of study, and the benefits resulting from it are apparent in the children's clothing in school, and are felt and appreciated in many homes.

Though this kind of instruction may not have been within the original scope of our system of education, yet there is no reason why it should not now be included if it can be made useful to the children. There can be no doubt of its value as a part of female education, and this fact is so generally admitted that in most of the private schools there is a department of sewing in which such instruction is given as may be made available either for home use or as a means of support.

Many of our pupils may never have the opportunity of acquiring this useful knowledge at home, and must therefore grow up in ignorance of that which is indispensable to every woman, whatever her circumstances may be, unless such instruction is furnished to them in the schools.

The additional annual cost of this instruction will be so small that no possible objection can be made on that account, and the resulting benefits will undoubtedly fully justify the outlay.

CONDITION OF THE SCHOOLS.

The general condition of the schools is satisfactory. The number of pupils has largely increased, the grade of scholarship has advanced, the teachers and pupils have generally performed their work with fidelity and zeal, additional facilities have been furnished, and liberal appropriations made, and there is undoubted evidence of progress during the past year.

All may not have been accomplished that was desired, or possibly that ought to have been done, and yet, if there are some things to condemn, there is still much to commend. It is much easier for the critic to see defects than it is to suggest proper remedies.

Though our system of education is excellent in many respects, and is accomplishing such good results, yet there is undoubtedly much room for further improvement, and it is believed that even better results will be effected in the future. During each successive year the experienced and faithful educator will find something to add or omit for the benefit of the schools, and thus, from time to time, our system of instruction will approximate to that higher excellence to which it aspires.

The studies and discipline of the schools conform to public demand, and our purpose has been to regulate the amount and grade of instruction, so that there may be no reasonable complaint by parents or pupils, and that the children may not be overtasked at the expense of their health. Good scholarship is compatible with

good health, and we seek to secure both by the adoption of proper sanitary rules in connection with study.

As we have heretofore said in previous reports, it is impossible to gratify the views and wishes of every one concerning the management of the schools, or to reconcile their conflicting opinions with reference to public education. We believe it to be our duty to furnish such liberal instruction to the pupils of the schools as will properly fit them to perform successfully their duties to society in whatever sphere they may be called to act. Every department of useful knowledge should be accessible to the children of all classes in the community, and there should be no recognition of the fallacious doctrine that "our schools are intended for the poor, and for the poor only."

They must be so modeled and conducted as to meet the approval and secure the patronage of the rich and the poor, and for this purpose they should be liberally supported by those in authority, so that every child should feel that he is receiving his education as a right, and not as "charity."

The full and satisfactory reports of the Superintendent and Assistant Superintendent show the work and progress of the schools during the past year, and contain some valuable recommendations for their improvement. They have visited all the schools, and carefully examined the classes, and gave special assistance and attention to those which most needed their advice and encouragement.

The number of students in *Baltimore City College*

was 633, being an increase of 37 over the preceding year, under the charge of 15 teachers.

The total cost was $35,074, and the amount received for use of books was $3,445.73, both being greater than during the previous year.

In consequence of the increase in the number of students it was necessary to have an additional teacher, and Mr. Philip H. Friese, a graduate of the College, was appointed tutor, at a salary of $1,000 per annum.

The work in the different departments of the College has been satisfactorily performed, though some of the students fail to meet the requirements for promotion, and have to remain two or more years in the same class. The Principal attributes these failures for promotion to the age of those sometimes admitted at the annual examinations, who, though able to pass the tests for admission, are too young to continue successfully the studies in the College, and he recommends that no one shall hereafter be admitted under 13 years of age. The subject is now under consideration by the committee, and, if satisfied that a change will be beneficial, the present rule will be altered so as to conform to the views of the Principal.

The *Female High Schools* continue to perform their work with success and satisfactory results.

The number of pupils was 1004, being an increase of 30 over the previous year, under the charge of 25 teachers.

The total expense of these schools was $31,470.32, and the amount received for use of books was $2,830, the cost being greater and the receipts less than during 1882.

These schools continue to retain the public confidence, and are increasing in numbers from year to year.

They were supplied during the past year with new philosophical apparatus, and this department is now in more satisfactory condition than it has been for many years.

The Principal of the Western Female High School reports the building to be so crowded as to be uncomfortable, and is urgent for an enlargement of the house so as to give more class-rooms.

Miss Isabella Hampson, who had been a teacher since 1867, resigned in June, 1883, and Miss Annie O. Sollers was elected to her position. In consequence of the increase of pupils, two additional teachers were elected, Miss Mary H. Thomiz and Miss Bessie G. Thomson.

Miss Hampson was a faithful and successful teacher, and the other three teachers who were recently elected, have been connected with the public schools for several years, and will doubtless be successful in this new field of labor.

Miss Laura M. Mullin, who had been the teacher of Drawing in the Eastern Female High School for a long time, was compelled to resign in consequence of ill health. She has been a faithful and efficient teacher, and her resignation was accepted with regret.

The regular course of study is four years, and but slight change has been made in the curriculum since the last report.

Some complaint has been made that there are too many studies in Baltimore City College and the Female High Schools, and the matter has been referred to a committee for investigation, and if it is ascertained that the complaint is well founded, there will be a proper reduction made during the year.

The number of *Grammar* and *Primary Schools* is the same as during the previous year, but there has been an increase of 1,062 pupils in these departments.

The total number in the Grammar Schools is 10,658, under the charge of 257 teachers. The cost of these schools was $212,204.48, and the amount received for use of books was $17,966.25.

The number of pupils in the Primary Schools was 16,521, under the charge of 357 teachers, and their cost was $222,193.46, and the receipts for the use of books were $11,219.36.

The Superintendent reports favorably on the condition of the Grammar Schools. He says that "since the last report was submitted, the work of the grades has been carefully revised and rendered more suitable to the wants of the schools. Prominence has been given to the idea of making the work more practical and thorough, without impairing its disciplinary character, the mind is trained in logical thinking processes, while at the same time preparation is being made for the

actual business of life." He properly attributes this improvement in the work in the schools to the benefits resulting to the teachers from their monthly meetings, where they have discussed their work and methods of instruction, and commends them for their zeal and diligence.

He earnestly recommends that a Training School be established, in which those who intend to become teachers, as well as those who have recently been appointed, may be enabled to receive such instruction as will assist them in their work.

The subject is now under consideration by a committee of the Board, and, if favorably reported, the school may be established during the year.

The *Primary Schools* are under the special supervision of the Assistant Superintendent, who visits them frequently, and aids the teachers in their work.

These schools are now divided into six grades in place of five, and the change has produced satisfactory results.

The report of the Assistant Superintendent contains some excellent recommendations for the benefit of this department, which should receive the prompt consideration of those in charge of the schools.

There are five *Public* (formerly *English-German*) *Schools*, containing 3,869 pupils, under the charge of 91 teachers, being an increase of 221 pupils over the previous year. These schools are in a prosperous con-

dition, and contain more pay pupils in proportion to the whole number than any other part of our system.

Their cost during the past year was $60,494.86, and the amount received for use of books was $10,909.65, the number of pay pupils being 3,479, and free pupils 390.

The parents of the children who attend these schools seem fully to appreciate the privileges they enjoy, and are not only willing to pay the fee for use of books, but also aid the teachers in their work by requiring the prompt attendance of their children.

There are fourteen *Colored Schools*, containing 4,861 pupils, under the charge of 104 white teachers, being an increase of 547 pupils.

The cost was $65,321.74, and the receipts for use of books, $73,—there being only 30 pay pupils.

The Colored High and Grammar School was established for the purpose of furnishing instruction above the primary grade, and now contains 424 pupils, 18 of whom are in the High School grade.

These schools are classified in the same manner as those for white children, and present the strongest argument in behalf of the policy of liberally providing for the education of colored children. It is undoubtedly our duty to furnish them good school houses, good teachers, and every other reasonable facility for obtaining all the education they desire.

It is the best investment of the public money that can be made in their behalf, and will more certainly satisfy them of our sincere purpose to do full justice to them in their new relation to society than all the political teachings of the demagogues who are striving to engender ill-feeling and strife.

Application has been made to appoint colored teachers in these schools, but the Board is not yet satisfied that the proposed change will be for the best interest of the schools.

The teachers now in charge have been zealous and faithful in the discharge of their duties, and are entitled to special commendation, in view of the disadvantages under which they have often been compelled to perform their work.

We hope, therefore, on their account, as well as for the general interest of their pupils, that the estimated appropriation will be made for the Colored Schools.

CONCLUSION.

In concluding this brief report of the work and condition of the schools during the past year, it is gratifying to notice their continued prosperity, and the strong confidence with which they are sustained by public sentiment.

It is evident that they have not stood still; but, on the contrary, have gone forward, and there is every reason to believe that they will continue to do so in the future.

Our citizens often differ in opinion with reference to other matters which claim the attention and support of the city, but all agree upon the value and importance of public education to the community, and that the schools should be liberally supported.

They are open to all persons without distinction of race, religion or party. They do not appeal to party or sect for their support, but have heretofore successfully repelled every effort that has been made by bigots to secure their control.

It matters not what a man's political sentiments or religious views may be when he accepts the office of Commissioner of Schools, it is then his duty to divest himself of all sectarian and political prejudices in this relation, and to act only for the welfare of the children committed to his charge.

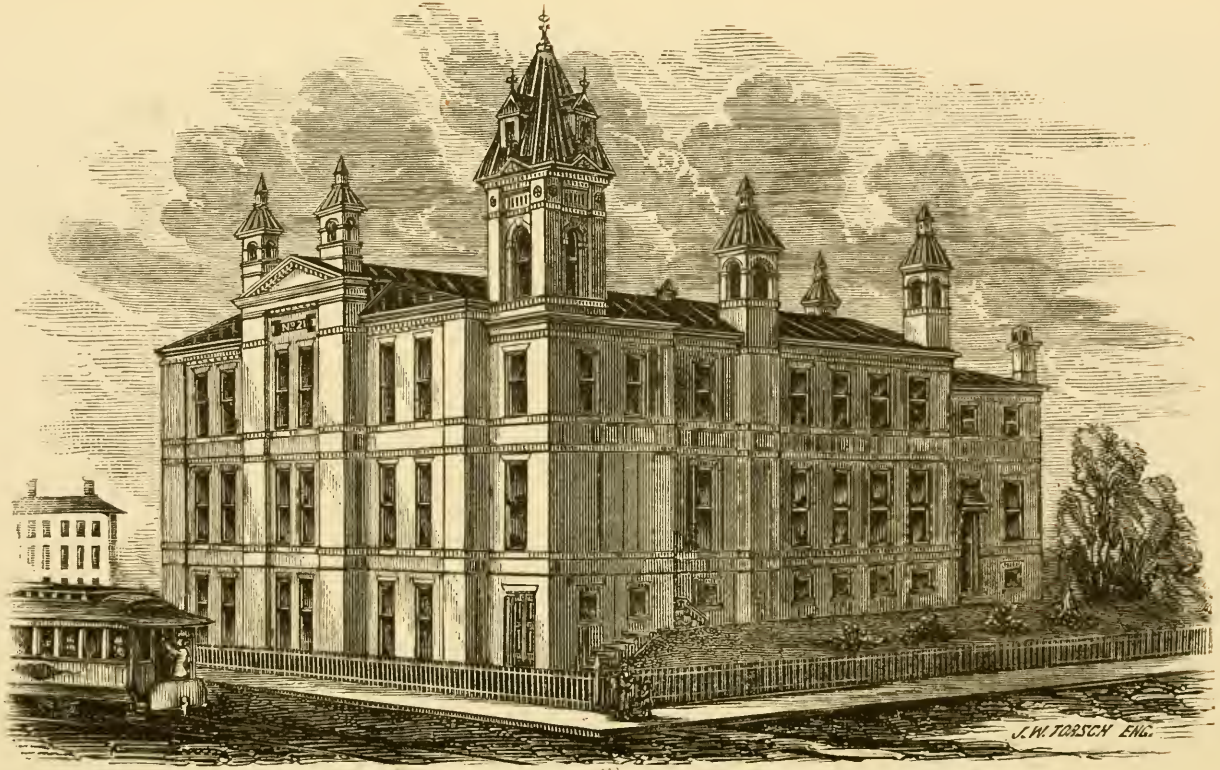
Any other course of conduct would be discreditable to the Commissioner and disastrous to the schools. It would subject officers and teachers to removal if they should differ from the opinions of those who have the power of appointment, and would secure positions for others as a reward for party fealty. It would demoralize the system of free education, impede the diffusion and progress of intelligence in the community, and thwart the noble purposes for which the schools were founded.

It is impossible to foresee the future, or to predict what may happen in the struggle for place and power, but it is undoubtedly the duty of all good citizens who

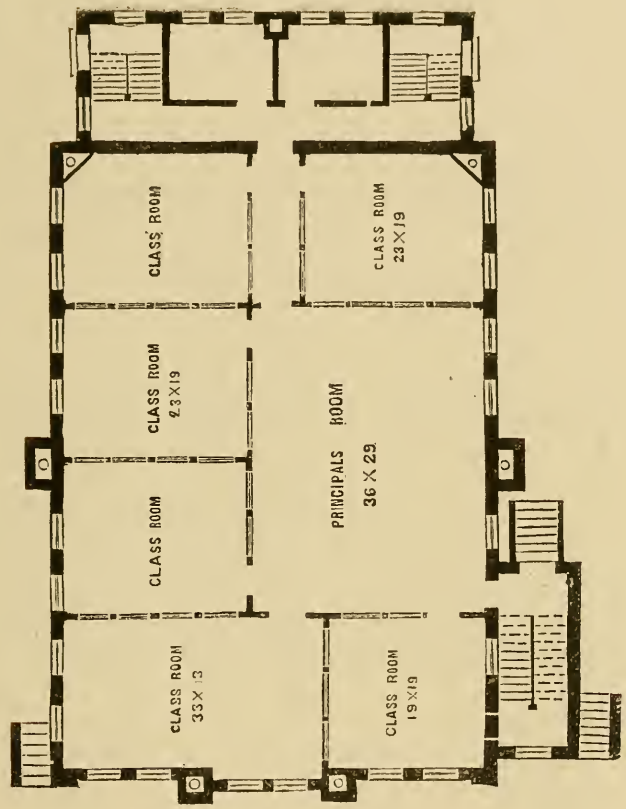
are the friends of free education to discourage every effort made by politicians, or others, to render the schools subservient to party purposes.

JOHN T. MORRIS,

President.



Male and Female Grammar Schools No. 21, Corner Gilmor and Presstman Streets.



Ground Plan of No. 21.

REPORT

OF THE

COMMITTEE ON ACCOUNTS

TO THE

Board of Commissioners of Public Schools.

REPORT.

BALTIMORE, December 31, 1883.

Your Committee respectfully report that, in compliance with Art. 7, Sec. 7, of the Rules of the Board, they have examined the accounts of the Secretary of the Board and find them correct, and that, so far as they relate to the amount received from pupils for the use of books, they correspond with the statements made by the principals of the several schools.

The entire amount received by the Secretary from the schools during the year 1883 for the use of books was $46,440.99. The receipts of the City Register show that this entire amount has been transferred to him.

The accompanying tables, prepared by the Secretary, show the amount appropriated by the City Council for the support of the schools; the amount expended; itemized expenditures of each school; value of school buildings; amount of ground-rents; schedule of salaries, &c.

J. WM. KINES, *Chairman.*
J. B. WENTZ,
ROBT. H. SINCLAIR,
WM. M. IVES,
H. B. ROEMER.

The amount appropriated by the City Council for the current expenses of the Board was	$649,401 93
The amount expended was	649,398 71

The following are the items of expenditure, including both white and colored schools:

Amount paid salaries		$525,035 05
" " rents and ground-rents	29,970 33	
" " books and stationery	41,735 84	
" " heating apparatus and its repairs	11,006 62	
" " furniture	5,606 47	
" " fuel	20,096 79	
" " repairs and cleaning	5,927 35	
" " incidentals, printing, &c	10,020 26	
		$649,398 71

Of the foregoing amounts there were expended—

For white schools:

For salaries	$471,308 60	
" rents and ground-rents	26,285 58	
" books and stationery	38,272 53	
" heating apparatus and repairs	9,819 42	
" furniture	5,549 97	
" fuel	17,964 03	
" repairs and cleaning	5,350 36	
" incidentals, printing, &c	9,526 48	
Total, white		$584,076 97

Amount brought forward		$584,076 97
Amount expended for colored schools:		
For salaries	$53,726 45	
" rents and ground-rents	3,684 75	
" books and stationery	3,463 31	
" heating apparatus and repairs	1,187 20	
" furniture	56 50	
" fuel	2,132 76	
" repairs and cleaning	576 99	
" incidentals, printing, &c.	493 78	
Total, colored		65,321 74
There was also expended for school purposes by the Inspector of Buildings:		
Balance on Primary No. 14, new	$6,546 00	
On account of Gram. " 11, "	2,029 26	
For repair of old buildings	9,997 93	
		18,573 19
Total expenditures for school purposes		$667,971 90
The receipts from various sources are as follows:		
From the City Collector for taxes		$425,628 10
" the State Treasurer for white schools		124,425 22
" " " " " colored "		19,468 48
" white pupils for use of books		46,370 99
" colored " " "		73 00
" John F. Plummer—interest on legacy		129 59
		$616,095 38

Estimates of the amounts required for the several items of expenditure for the year 1884:

For salaries, white schools		$480,000 00
" rents and ground-rents, white schools		29,000 00
" books and stationery, " "		39,000 00
" heating apparatus and repairs, " "		10,500 00
" furniture, " "		7,000 00
" fuel, " "		18,500 00
" repairs and cleaning, " "		6,000 00
" incidentals, printing, &c., " "		10,000 00
" evening schools		5,000 00
" colored schools		70,000 00
		$675,000 00
For the Manual Training School		10,000 00
Total		$685,000 00

TABLES

Showing the Itemized Expenditures for each of the Several Schools, the Total Expenditures for each, and the Amount Received from each for the Use of Books.

Schools.	Salaries.	Repairs and Cleaning	Books and Stationery	Rents and Ground Rents.	Heating Apparatus and its Repairs.	Furniture.	Fuel.	Incidentals and Printing.	Totals.	Amount received from Pupils.
General Expense Acc't.	$15,324 00	140 36	213 16	.....	.....	65 50	.....	6,898 74	22,641 76	.....
Baltimore City College.	24,400 00	225 35	2,427 62	4,600 00	2,010 00	38 50	600 30	772 32	35,074 09	3,445 73
East. Fem. High School	11,116 00	18 00	944 08	540 91	164 51	6 00	561 10	489 73	13,840 33	904 00
West. " " "	13,516 00	43 75	1,356 52	1,188 00	414 80	46 00	571 45	493 47	17,629 99	1,926 00
Male Grammar No. 1.	5,760 00	4 00	604 57	177 00	31 10	.....	354 97	38 25	6,969 89	699 50
" " 2.	5,582 50	75 43	713 90	122 22	94 14	68 00	90 38	5 00	6,751 57	578 00
" " 3.	4,116 00	12 50	352 04	225 00	10 40	11 00	160 20	12 26	4,899 40	203 40
" " 4.	4,556 00	44 18	486 60	300 00	38 15	12 00	115 78	6 25	5,558 96	400 25
" " 5.	3,833 50	141 80	353 68	300 00	56 00	20 50	105 40	6 00	4,816 88	92 50
" " 6.	6,336 00	8 00	771 98	550 00	36 75	.....	380 36	6 55	8,089 64	1,295 89
" " 7.	4,615 75	56 30	439 15	175 00	21 00	.....	224 67	7 50	5,539 37	214 00
" " 8.	5,489 50	43 58	600 15	350 00	124 54	31 75	164 78	4 00	6,808 30	542 00
" " 9.	2,967 00	31 65	206 16	.....	47 07	.....	101 37	2 50	3,355 75	204 60
" " 10.	4,516 50	67 12	522 67	87 50	64 87	95 00	94 48	10 40	5,458 54	228 40
" " 11.	4,590 00	100 88	495 20	309 50	50 90	.....	166 88	.....	5,713 36	236 50
" " 12.	5,220 00	80 62	789 37	310 34	130 00	17 50	182 48	13 46	6,743 77	133 00
" " 13.	3,843 00	30 25	430 70	12 50	57 63	.....	117 78	5 00	4,496 86	298 00
" " 15.	6 987 75	192 97	919 11	200 00	174 15	198 25	188 68	11 25	8,872 16	1,146 50
" " 17.	3,840 50	33 25	322 27	186 00	57 80	12 00	111 55	.....	4,563 37	353 16
" " 18.	4,150 00	22 59	419 02	175 34	39 59	.....	232 27	12 75	5,051 56	235 90
" " 19.	4,632 60	19 00	550 49	137 25	67 54	.....	97 43	6 00	5,510 31	919 50
" " 20.	5,092 00	52 45	606 97	186 50	88 65	.....	137 46	8 75	6,162 78	396 00
" " 21.	4,580 60	5 00	500 37	310 00	66 40	160 00	143 50	3 00	5,768 87	767 05
Total Male Gram.....	$90,709 20	1,021 57	10,084 40	4,114 15	1,256 68	626 00	3,170 42	158 92	111,141 34	8,944 15

Public School No. 1..	7,723 75	30 00	659 86	150 00	148 44	.....	244 90	2 25	8,959 20	815 00
" " 2..	9.501 50	53 25	695 94	372 50	19 00	.....	247 20	25 25	10,914 64	2,166 00
" " 3..	13,931 65	98 25	1,647 69	1 000 00	44 21	59 00	320 06	21 00	17,121 86	3,825 65
" " 4..	9,280 65	7 75	919 34	501 75	26 50	2 00	497 05	37 00	11,272 04	2.271 00
" " 5..	10,513 50	79 93	1,233 19	.....	119 59	19 60	261 31	.....	12,227 12	1,832 00
Total Public Schools..	$50,951 05	269 18	5,156 02	2,024 25	357 74	80 60	1,570 52	85 50	60,494 86	10.909 65
Female Grammar No. 1	5,739 50	11 00	386 82	547 38	15 50	.....	223 65	29 50	6,953 35	1,110 08
" " 2	4,611 00	31 35	498 33	123 22	76 23	70 00	90 37	.....	5 499 50	318 25
" " 3	3,192 00	12 50	289 32	225 00	.....	5 00	144 78	7 50	3,876 10	195 00
" " 4	3,616 50	22 45	391 05	300 00	38 00	15 25	109 10	.....	4,493 35	437 25
" " 5	3,642 00	104 06	479 85	300 00	66 80	33 75	108 57	.....	4,735 03	78 00
" " 6	4,697 00	15 80	428 59	400 00	.....	.....	380 34	1 00	5 922 73	1,097 00
" " 7	3,247 00	43 70	280 17	175 00	33 80	.....	221 00	7 50	4,008 17	219 67
" " 8	5.193 50	36 08	553 10	350 00	121 79	51 25	153 07	17 05	6,475 84	610 25
" " 9	2,556 30	31 00	230 94	.....	37 05	.....	117 59	.....	2 972 88	159 00
" " 10	3,643 00	24 50	345 70	87 50	48 32	26 25	94 47	.....	4 269 74	234 50
" " 11	4,154 50	113 29	472 22	9 50	85 63	.....	140 51	39 41	5,015 06	256 50
" " 12	4,100 60	30 78	628 15	310 33	133 77	.....	182 47	.....	5,385 50	134 00
" " 13	4 634 00	77 25	688 57	12 50	68 85	23 00	116 95	.....	5 621 12	561 00
" " 15	6,172 00	144 70	699 79	200 00	165 00	329 60	182 25	10 00	7,903 34	1,057 50
" " 16	2,771 10	53 75	253 70	350 00	12 55	235 50	399 58	20 00	4.096 18	129 00
" " 17	3,726 50	34 84	368 23	186 00	46 20	6 75	114 97	75	4.484 24	464 25
" " 18	3,260 50	17 50	295 84	175 33	26 58	.....	229 33	.....	4.005 08	204 00
" " 19	2,981 50	56 81	231 99	137 25	34 70	11 75	91 10	.....	3,545 10	429 50
" " 20	4,625 00	107 40	495 46	186 50	89 05	31 00	130 92	.....	5,665 33	234 00
" " 21	4,649 60	8 90	545 26	310 00	87 24	378 00	154 75	75	6,134 50	1,003 35
Total Fem. Grammar..	81,212 50	977 66	8,563 08	4,384 51	1,187 06	1,217 10	3,385 77	133 46	101,061 14	9,022 10
Male Primary No. 1..	4.764 00	.....	264 51	177 00	25 22	.....	342 78	.....	5,573 51	609 75
" " 2..	2,569 50	125 08	142 56	125 00	57 45	6 00	99 76	2 25	3,127 60	44 40
" " 3..	3,222 00	121 16	213 43	225 00	.....	14 00	160 20	9 50	3,965 29	131 75
" " 4..	2,988 60	87 06	168 47	105 00	61 57	43 00	120 57	2 25	3,576 52	240 10

TABLES—Continued.

Schools.	Salaries.	Repairs and Cleaning	Books and Stationery.	Rents and Ground Rents.	Heating Apparatus and its Repairs	Furniture.	Fuel.	Incidentals and Printing.	Totals.	Amount received from Pupils.
Male Primary No. 5..	$5,014 55	16 00	285 09	300 00	23 00	13 50	325 50	8 00	5,985 64	42 00
" " 6..	3,573 70	69 25	242 28	56 25	65 35	.....	131 13	5 00	4,142 96	268 00
" " 7..	2,250 00	57 75	104 55	.....	54 07	7 50	107 45	5 00	2,586 32	112 75
" " 8..	2,217 00	18 50	109 62	85 50	44 62	15 75	75 81	6 25	2,573 05	58 00
" " 9..	1,631 75	46 11	102 41	.....	25 07	.....	101 37	.....	1,906 71	68 00
" " 10..	2,701 25	30 00	134 93	100 00	28 70	.....	70 83	.....	3,065 71	73 00
" " 11..	2,705 50	31 90	123 77	90 00	22 13	37 00	86 10	.....	3,096 40	94 10
" " 12..	3,598 40	17 85	208 17	134 00	56 45	11 75	88 95	.....	4 115 55	110 25
" " 13..	2,543 50	35 24	102 25	100 00	42 97	3 00	130 00	2 00	2,958 96	21 09
" " 14..	2,846 25	24 25	131 08	501 95	867 85	1,049 96	403 27	138 45	5,973 06	632 75
" " 15..	4,615 50	28 07	309 75	350 00	47 45	.....	165 70	2 50	5,518 97	708 75
" " 16..	3,461 60	68 72	185 60	395 00	19 25	6 75	183 22	.....	4,320 14	46 00
" " 17..	3,952 00	26 00	180 67	108 50	55 44	15 75	116 35	7 00	4,461 71	84 75
" " 18..	2,982 10	39 58	181 65	157 50	113 04	38 00	144 30	12 00	3,668 17	512 20
" " 19..	2,162 00	20 00	88 44	137 25	36 45	4 00	90 75	44 80	2,583 67	204 00
" " 20...	3,768 95	82 70	200 70	186 50	77 04	40 50	153 35	.....	4 509 74	213 25
" " 21...	3,241 15	133 15	178 86	160 00	115 54	65 00	159 75	8 50	4,061 95	339 54
" " 22..	3,155 50	17 85	103 88	88 75	62 87	.....	91 78	.....	3 520 63	12 50
" " 23..	3,183 00	43 40	200 40	75 00	42 63	14 00	111 15	.....	3,669 58	189 64
" " 24..	1,798 50	12 25	132 69	.. ....	29 34	8 00	63 48	7 00	2,051 26	92 50
" " 25..	2,696 50	104 74	132 86	67 00	28 15	5 00	95 21	5 00	3,154 46	77 32
" " 26..	2,757 00	16 75	116 41	63 00	35 25	13 50	96 20	6 50	3,104 61	91 75
" " 27..	3,456 60	41 03	137 41	137 50	48 45	36 00	93 35	.....	3,950 34	373 77
" " 28..	3,159 00	49 06	151 23	135 00	49 40	72 50	120 48	9 64	3,746 31	49 00
" " 29..	2,121 20	21 45	88 95	96 00	69 31	20 25	95 38	75	2,513 29	84 00
" " 30..	4,679 60	80 58	221 13	375 00	43 79	258 25	165 05	17 75	5,841 15	281 30
Total Male Primary...	$93,816 20	1,475 48	4,943 75	4,531 70	2,247 81	1,798 96	4,189 22	300 14	113,303 26	5,866 21

Female Primary No. 1.	4,773 75	.....	206 38	547 37	15 00	8 00	211 95	12 00	5,774 45	840 00
" " 2.	2,652 90	54 50	128 61	125 00	35 02	.....	112 02	.....	3,108 05	40 00
" " 3	2,890 00	14 50	128 42	225 00	.....	9 00	144 78	.....	3,411 70	100 50
" " 4.	2,683 00	41 00	117 31	105 00	30 12	9 00	93 35	.....	3,078 78	237 75
" " 5.	5,232 75	.....	281 15	300 00	.....	6 75	325 05	3 75	6,149 45	66 00
" " 6.	4,053 00	34 45	235 24	56 25	23 79	6 75	120 95	5 00	4,535 43	234 75
" " 7.	2,243 00	45 00	103 39	.....	42 60	7 50	101 83	.....	2,543 32	89 35
" " 8.	1,754 00	21 50	78 13	85 50	39 90	.....	68 92	2 50	2,050 45	75 00
" " 9.	1,989 60	65 50	111 56	.....	63 95	.....	102 38	.....	2,332 99	91 00
" " 10.	2,700 25	28 35	161 57	100 00	28 00	10 50	59 12	.....	3,087 79	83 00
" " 11.	2,755 90	20 50	129 43	90 00	21 30	13 50	85 65	.....	3,116 28	182 93
" " 12.	4,135 25	13 95	294 32	134 00	67 70	.....	88 50	16 00	4,749 72	48 00
" " 13.	2,661 65	26 84	99 26	100 00	59 61	22 75	118 25	.....	3,088 36	30 50
" " 14.	2,200 25	43 30	89 97	501 94	841 23	1,048 21	403 28	132 70	5,260 88	331 75
" " 15.	4,213 50	55 00	246 99	350 00	42 31	.....	152 41	.....	5,060 21	319 20
" " 16	3 015 75	32 50	155 42	395 00	.....	.....	177 38	5 00	3,781 05	27 00
" " 17.	3,291 25	48 95	104 15	108 50	55 25	.....	125 75	.....	3,733 85	167 50
" " 18.	2,701 20	36 33	137 58	157 50	45 74	33 00	155 85	.....	3,267 20	415 25
" " 19	2,226 50	200 55	165 11	137 25	242 01	40 75	90 50	.....	3,102 67	185 75
" " 20.	3,383 00	80 00	189 40	186 50	60 01	138 50	130 92	.....	4.168 33	291 75
" " 21.	3,188 55	21 60	144 81	160 00	108 59	68 25	174 21	3 00	3,869 01	270 45
" " 22	3,185 50	17 86	141 75	88 75	56 85	.....	91 32	.....	3,582 03	46 00
" " 23	3,183 00	47 85	180 53	75 00	46 94	.....	114 37	4 75	3,652 44	105 90
" " 24	1,674 50	10 00	80 92	.....	21 62	.....	57 10	.....	1,844 14	108 10
" " 25.	2,511 00	28 50	131 62	67 00	22 35	.....	95 19	.....	2,855 66	57 00
" " 26.	2,345 00	24 25	118 90	63 00	27 00	13 50	96 25	.....	2.687 90	106 25
" " 27.	3,180 00	25 80	169 19	137 50	47 56	68 60	93 25	.....	3,721 90	269 97
" " 28	2,868 50	63 75	115 22	135 00	50 31	51 00	94 47	.....	3,378 25	51 00
" " 29	2,237 60	10 00	104 11	96 00	72 96	.....	68 38	.....	2,589 05	64 50
" " 30.	4,333 50	66 68	233 46	375 00	13 10	115 75	161 87	9 50	5,308 86	317 00
Total Female Primary.	$90,263 65	1,179 01	4,583 90	4,902 06	2,180 82	1,671 31	3,915 25	194 20	108,890 20	5,353 15

TABLES—Concluded.

Schools.	Salaries.	Repairs and Cleaning.	Books and Stationery.	Rents and Ground Rents.	Heating Apparatus and its Repairs.	Furniture.	Fuel.	Incidentals and Printing.	Totals.	Received from Pupils.
High and Gram. Col'd.	$6,612 50	83 29	795 72	153 00	109 27	18 75	171 75	23 65	7,967 93	23 00
Male Colored No. 1..	1,942 50	46 45	121 55	153 00	33 80	.....	57 25	.....	2,354 55	.....
" " 2..	3,479 25	55 75	157 38	12 50	51 38	5 00	127 23	7 25	3,895 74	3 00
" " 3..	3,959 00	47 98	218 19	285 00	49 10	.....	118 71	9 73	4,687 71	.....
" " 4..	4,185 00	16 80	199 36	590 00	51 34	.....	107 95	5 00	5,155 45	22 00
" " 5..	2 563 00	56 50	128 21	93 75	34 26	5 00	82 68	7 50	2,970 90	4 00
" " 6..	4,915 80	42 95	279 64	300 00	97 85	8 75	189 25	13 00	5,847 24	.....
" " 7..	5,224 60	68 00	277 10	240 00	245 00	3 00	323 50	19 75	6,400 95	2 00
" " 8..	2,625 70	25 00	140 07	130 00	106 61	.....	108 30	2 00	3,137 68	.....
Female Colored " 1..	2,315 75	29 50	183 37	600 00	37 29	.....	203 50	.....	3,369 41	2 00
" " 2..	4,031 40	30 25	242 67	12 50	50 64	.....	99 82	.....	4,467 28	8 00
" " 3..	3,192 95	36 00	235 57	285 00	44 06	.....	112 27	.....	3,905 85	.....
" " 4..	3 217 25	12 50	133 20	590 00	46 60	.....	107 50	.....	4,107 05	5 00
" " 7..	4,661 75	26 02	286 37	240 00	230 00	16 00	323 05	12 00	5,795 19	4 00
General expense, Col'd.	800 00	.....	64 91	.....	.....	.....	.....	393 90	1,258 81	.....
Total Colored.....	$53,726 45	576 99	3,463 31	3,684 75	1,187 20	56 50	2,132 76	493 78	65,321 74	73 00

SUMMARY

Of the Amounts Expended for the several grades of Schools, with the Amounts Received from the same for the Use of Books.

SCHOOLS.	Salaries.	Repairs and Cleaning.	Books and Stationery.	Rents and Ground-Rents.	Heating Apparatus and its Repairs.	Furniture.	Fuel.	Incidental's and Printing.	Totals.	Amount Received from Pupils.
General Expense (White)	$15,324 00	140 36	213 16	.....	.....	65 50	.....	6,898 74	22.641 76	....
Baltimore City College	24,400 00	225 35	2,427 62	4,660 00	2,010 00	38 50	600 30	772 32	35,074 09	3.445 73
Female High Schools	24.632 00	61 75	2,300 60	1,728 91	579 31	52 00	1,132 55	983 20	31,470 32	2 830 00
Male Grammar "	90,709 20	1,021 57	10,084 40	4,114 15	1,256 68	626 00	3,170 42	158 92	111,141 34	8,944 15
Public Schools	50,951 05	269 18	5,156 02	2,024 25	357 74	80 60	1,570 52	85 50	60,494 86	10.909 65
Female Grammar Schools	81,212 50	977 66	8,563 08	4 284 51	1,187 06	1,217 10	3,385 77	133 46	101,061 14	9.022 10
Male Primary "	93,816 20	1,475 48	4,943 75	4,531 70	2,247 81	1,798 96	4,189 22	300 14	113.303 26	5,866 21
Female " "	90,263 65	1.179 01	4,583 90	4,902 06	2,180 82	1,671 31	3,915 25	194 20	108 890 20	5 353 15
Total—White Schools...	471,308 60	5,350 36	38,272 53	26.285 58	9,819 42	5,549 97	17,964 03	9,526 48	584.076 97	46,370 99
Colored Schools	53,726 45	576 99	3,463 31	3,684 75	1,187 20	56 50	2,132 76	493 78	65 321 74	73 00
Total for all Schools	$525,035 05	5,927 35	41,735 84	29,970 33	11,006 62	5,606 47	20,096 79	10,020 26	649.398 71	46,443 99

TABLE

Containing the Location of Public School Buildings, Size of Lots, Size of Buildings, Cost of Buildings, Date of Erection, &c.

Schools.	Location.	Size of Lot.	Size of Building.	Ground Rent.	Estimated Value or Cost of Building.	Date of Erection.
Baltimore City College.	Howard street, opposite Centre	120x262	100x162	$4,600 00	$134,000	1874
E. F. High School	Aisquith and Mullikin streets	102x210	102x56	540 91	97,805	1868
" " "	" " "	Re'r Bld'g	51x58			
W. F. High School	Fayette street, near Paca	98x144	72x132	1,188 00	60,000	1858
Male Gram. & P. No. 1.	N. E. corner Fayette and Greene streets	97x102	83x96[7]	354 00	17,350	1880
F. Gram. & P. No. 1	S. W. corner Fayette and Greene streets	77[6]x170	62x140	1,094 75	29,520	1875
Grammar No. 2	S. W. corner Broadway and Bank street	100x141	52x72	244 44	10,000	1834
" & P. " 3	West side High street, North of Fayette	80x167	50x145	900 00	28,863	1875
" " 4	East side Sharp street, near Montgomery	100x155	56x85	600 00	20,000	1869
" " 5	S. W. corner Greenmount ave. and Eager st.	66x150	55x100	600 00	17,000	1872
" " 6	N. E. side Division street, near Lanvale	104[2]x171[3]	55x120	800 00	28,338	1877
" " 7	S. E. corner Eastern avenue and Burke st	100x140	52x105	350 00	13,823	1880
" " 8*	N. side Hollins street, near Fulton	139x129	54x112	700 00	19,512	1877
" & P. " 9	E. side Courtland street, near Saratoga	82x90	44x90	In fee.	18,350	1868
" " 10	S. E. corner William and Warren streets	70x140	44x103	175 00	17,900	1850
" " 11	N. W. corner Jefferson and Bond streets	70x152[3]	56[3]x116	19 00	17,019	1884
" " 12	S. side Ridgely street, near Fremont	124[1]x155	73x125	620 67	29,265	1877
" " 13	E. side Aisquith street, near Mullikin	55x180	44x100	25 00	20,000	1870
" " 15	E. side Carrollton ave., near Lexington st	100x150	55x107	400 00	25,000	1860
" " 16	Corner Hull and Clement streets	100x155[5]	56[4]x113[4]	350 00	11,000	1882
" " 17	E. side Washington street, near Fayette	93x190	52x80	581 25	17,000	1871
" " 18	N. side Mulberry street, near Fremont	87[8]x134	54x85	350 67	20,000	1868

TABLE

Containing the Location of Public School Buildings, Size of Lots, Size of Buildings, Cost of Buildings, Date of Erection, &c.—Continued.

SCHOOLS.	LOCATION.	Size of Lot.	Size of Building.	Ground Rent.	Estimated Value or Cost of Building.	Date of Erection.
Gram. & Prim. No. 19...	E. side Park avenue, near Preston street.....	91[6]x150	68x103	$549 00	$32,000	1869
" " " 20...	N. W. corner Preston and Eden streets.....	100x191	51x167	536 00	32,000	1868
Grammar " 21...	N. E corner Presstman and Gilmor streets...	102[5]x155[7]	55x96	620 00	19,741	1876
Public No. 1.....	E. side Druid Hill ave., near Biddle street.....	75x100	44x100	150 00	15,000	1841
" " 2.....	N. E. corner Charles and Ostend streets.....	74[6]x219	56x107	372 50	17,800	1882
" " 3.....	N. side Baltimore street, near Aisquith.....	90x170	54x118	1,000 00	15,026	1879
" " 4.....	S. W. corner Chase and Ann streets.....	82x223	56x133[2]	501 75	20,000	1882
" " 5.....	W. side Fremont street, near Lombard.....	74x150	44x65	In fee.	10,000	1845
Primary No. 2.....	N. E. corner Gough and Stiles streets.....	75x92	32x55	250 00	10 000	1854
" " 4.....	N. E. corner Hanover and Lee streets.....	80x76[6]	52x76	210 00	10,000	1834
" " 5.....	S. E. corner Broadway and Chew streets.....	120x120	60x113	600 00	18,791	1876
" " 6.....	E. side Ann street, near Canton avenue.....	65x140	46x100	112 50	14,831	1878
" " 7.....	N. side Mullikin street, near Aisquith.....	74x100	45x65	In fee.	6,000	1864
" " 8.....	E. side Caroline street, near Lombard.....	57x92[5]	34x50	171 00	3,000	1855
" " 10.....	N. side Hollins street, near Schroeder.....	60[8]x134	46x70	200 00	5,000	1855
" " 11.....	N. E. corner Pierce and Schroeder streets....	60x100	34x70	180 00	8,000	1854
" " 12.....	S. W. corner Barre and Warner streets.....	67x120	55x84	268 00	18,000	1870
" " 13.....	N. side Jefferson street, near Caroline.....	83[6]x80	32x80	200 00	6,000	1855
" " 14.....	Corner Linden avenue and Wilson street.....	105x150	55x117	840 00	15,500	1882
" " 15.....	S. W. corner Saratoga st. and Carrollton ave.	100x150	50x120	700 00	22,800	1872
" " 16.....	N. E. corner Harford ave. and Chew street...	105x158	56x113	790 00	21,451	1876
" " 17.....	S. W. corner Light and Poultney streets.....	62[1]x122	50x72	217 00	10,000	1875

Primary No. 18	E. side Argyle ave., near Lanvale street	80x140	45x68	315 00	7,000	1858
" " 21	E. side Pennsylvania ave., cor. Robert street.	80x155	50x80	320 00	18,500	1869
" " 22	S. side Ramsay street, near Scott	71x128⅚	45x95	177 50	11,000	1855
" " 23	N. E. corner Gough and Wolfe streets	75x95	45x50	150 00	5,000	1852
" " 24	Corner Chesapeake and Hudson streets	80x100	32x50	In fee.	8,000	1853
" " 25	W. side Caroline street, near Bank	76x90	45x65	134 00	5,000	1867
" " 26	N. side of Orleans street, near Bond	84x75	50x65	126 00	15,000	1874
" " 27	S. W. corner Fayette and Chester streets	92x120	48x72	275 00	18,000	1869
" " 28	N. W. cor. Battery ave. and Clement street	75x82	46x82	270 00	12,000	1869
" " 29	N. side Hill street, near Sharp	48x90	34x50	192 00	6,000	1854
" " 30*	N. side Hollins street, near Fulton	150x129⅚	55x82	750 00	15,618	1874
Col'd Gram. No. 1 / " Prim. M. " 1	E. side Holliday street, near Lexington	52x107⅚	52x80⅞	306 00	10,000	.....
" " F. " 1	N. side Saratoga street, near St. Paul	30x193	30x40	600 00	2,000	.....
" " No. 2	E. side East street, near Douglass	75x105	49x80	25 00	14,809	1874
" " " 3	S. E. cor. Howard and Montgomery streets	50x104	40x64	120 00	10,000	1872
" " " 5	S. side Eastern avenue, near Broadway	51x60	51x60	93 75	3.000	.....
" " " 6	N. side Barre street, near Eutaw	65x112	40x80	300 00	15.000	1854
" " " 7	N. side Waesche street, near Fremont	143⅜x120	59x120	480 00	22,074	1877
" " " 8	S. E. corner Bond and Chew streets	80x80	40x54	130 00	8,000	1864
RENTED.						
Male Gram. No. 6	Pennsylvania avenue	.....	.....	150 00	.....	.....
Male Gram. No. 11	270 East Fayette street	.....	.....	900 00	.....	.....
Female Gram. No. 11	Broadway and Monument street	.....	.....	800 00	.....	.....
Gram. and Prim. No. 20	420 North Eden street	.....	.....	420 00	.....	.....
Colored No. 3	174 Hamburg street	.....	.....	540 00	.....	.....
" " 4	Biddle street, near Pennsylvania avenue	.....	.....	1,180 00	.....	1877
	Total ground rents	.....	.....	$27,725 69		
	Total value of buildings, actual and estimated	.....	.....	.....	$1,188,686	
	Total amount of rents	.....	.....	$3,990 00		

*The two lots leased for Grammar No. 8 and Primary No. 30 aggregate 289 front feet, but only 160 of it are used by those buildings.

SCHEDULE

—OF—

Salaries of Officers and Teachers

—OF—

PUBLIC SCHOOLS.

GENERAL EXPENSE ROLL.

Superintendent of Public Instruction	$2,500
Assistant Superintendent	1,800
Secretary	1,700
Clerk	1,100
Librarian	1,000
Teachers of Music, each	1,200
Teachers of Drawing, each	500
Librarian of Public School Library	900

BALTIMORE CITY COLLEGE.

Principal	$2,400
Professors (not otherwise specified)	2,000
Professor of Writing and Book-Keeping	1,800
Professor of Drawing	1,800
Adjunct Professors	1,800
Tutors	1,000

FEMALE HIGH SCHOOLS.

Principals	$2,208
First Assistants	1,008
Second Assistants	900
Teachers of French and Drawing, each	900

MALE GRAMMAR SCHOOLS.

	1st Year.	2d Year.	3d Year.
Principals	$1,296	$1,404	$1,500
First Assistants (Male)	804	900	
First Assistants (Female)	588	672	
Second Assistants	456	516	
Third Assistants	444	504	

FEMALE GRAMMAR SCHOOLS.

	1st Year.	2d Year.
Principals	$804	$900
First Assistants	564	648
Second Assistants	444	504
Third Assistants	432	480

SATURDAY NORMAL CLASS.

Principal	$200
Assistants	150

MALE AND FEMALE PRIMARY SCHOOLS.

	1st Year.	21 Year.	31 Year.
Principals	$600	$696	
Assistants	408	432	$468

UNCLASSIFIED SCHOOLS.

Composed of Primary and Grammar Scholars.

	1st Year.	21 Year.	31 Year.
Principals	$696	$780	$900
First Assistants	504	552	600

PUBLIC SCHOOLS.

	1st Year.	2d Year.	31 Year.
Principals	$1,296	$1,404	$1,500
Vice-Principals	804	900	1,008
First Assistants, (Male)	600		

Assistants, Grammar Grades, same as Third Assistants in Male Grammar Schools.

Assistants, Primary Grades, same as Assistants in Primary Schools.

COLORED GRAMMAR SCHOOLS.

The same as the Male Grammar Schools.

COLORED (PRIMARY) SCHOOLS.

	1st Year.	2d Year.	3d Year.
Principals (Male).....	$804	$900	
Principals (Female).....	600	696	
Assistants (Male).....	700		
Assistants (Female).....	408	432	$468

EVENING SCHOOLS.

Principals, $2 per night, for actual service.
Assistants, $1.50 per night for actual service.

The Schedule of Salaries to be subject to the following conditions:

All below the grade of Second Assistant in Male and Female Grammar Schools to be graded as Third Assistants, the Board of School Commissioners to determine, at the annual election, the grade of each Assistant; in case of failure to do so, the Senior Assistant to grade highest in all cases.

In Male and Female Grammar Schools not employing three Assistants, the lowest Assistant shall rank as Third Assistant, and so continue until there are three Assistants employed in that school, excepting the First Assistant, who shall, in all cases, rank as First Assistant.

Teachers who may have served for *two full* years in any of the Public Schools of Baltimore, upon promotion to Grammar Schools, shall be entitled to the second year's salary of that grade to which they may be assigned, excepting that of Principal.

Teachers who may have been engaged in teaching for *three* years previous to their election shall be entitled to the highest salary of that grade to which they may be assigned (excepting that of Principals of Grammar Schools), upon producing satisfactory evidence of that fact to the President of the Board.

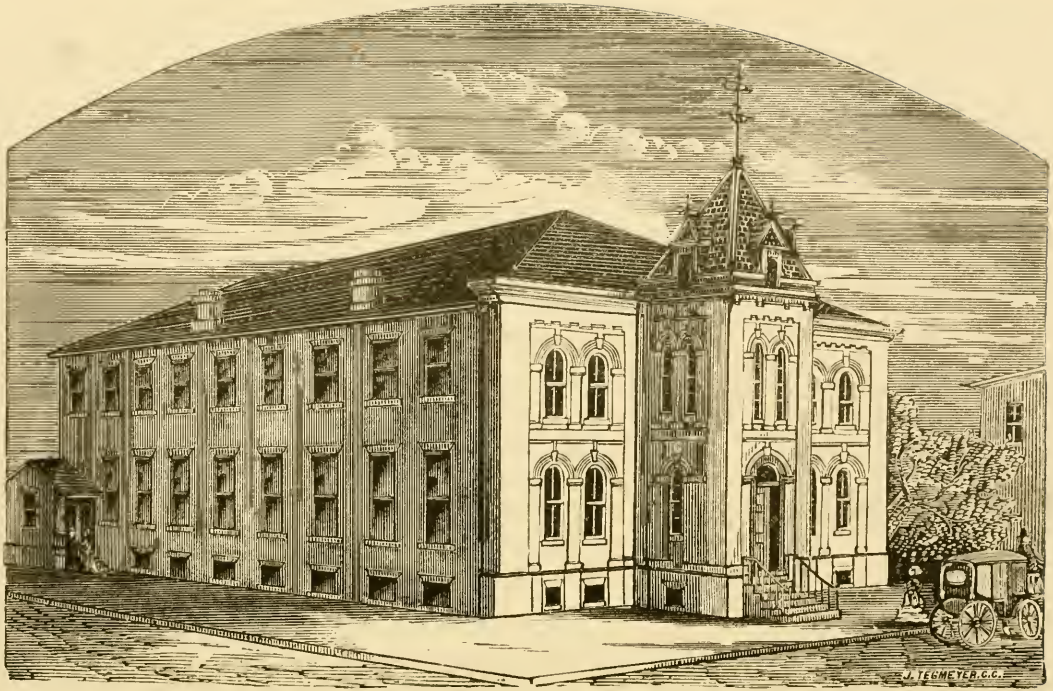
Teachers elected during the month of September shall receive the full salary for the months of July and August of the succeeding year; those elected in October shall receive nine-tenths of said salary; in November, eight-tenths, and so on to the close of the scholastic term.

SALARIES OF JANITORS, JANITRESSES AND FIREMEN.

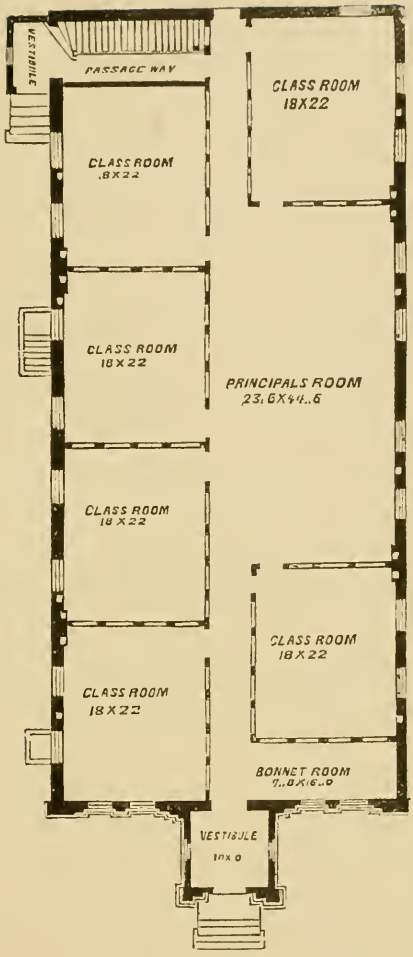
Janitor and Fireman of Baltimore City College	$1,000
Firemen of Female High Schools, each	400
Janitresses of Female High Schools, each	300

Fireman and Engineer of No. 1 Male Grammar and Primary Schools, $30 per month; of No. 3 Grammar and Primary Schools, $20 per month, and of No. 3 Public school, $20 per month; and for all furnaces in other schools, $5 each per month during the season.

Janitresses of schools having three classes shall receive $8 per month; four classes, $9 per month; five classes, $10 per month; six classes, $10.50 per month, and increase 50 cents per month for each additional class. They shall also receive 50 cents per month for each fire required in stoves in the schools from October to April, inclusive.



Male and Female Grammar School No. 13, Aisquith Street, near Mullikin.



Ground Plan of No. 13.

REPORT

OF THE

Superintendent of Public Instruction.

REPORT.

BALTIMORE, January 1, 1884.

To the Mayor and City Council, and the
Board of Public School Commissioners
of the City of Baltimore:

GENTLEMEN:

In compliance with the rules, the following report of the condition and statistics of the schools for the preceding year is submitted for your consideration.

SUMMARY OF STATISTICS.

Population of Baltimore, U. S. Census of 1880		332,313
Enumeration, Public School Census of 1879		86,961
School-age		6-21
Basis of Taxation		$247,000,000
Tax levied for School Purposes—City, 1⅘ mills; State, 1 mill		2⅘ mills.
Number of pupils in school during the year		48,876
Increase	599	

Number of pupils on roll November 20, 1883		37,576
Increase	1,879	
Average attendance		31,601
Increase	2,423	
Number of teachers, including 7 special teachers		855
Increase	29	
Number of schools		121
Same as last year.		
Number of pupils in High Schools		1,637*
Increase	67	
Number of pupils in Grammar Schools.		10,658
Increase	62	
Number of pupils in "Public Schools."		3,869
Increase	221	
Number of pupils in Primary Schools.		16,521
Increase	1,000	
Number of pupils in Colored Schools.		4,861
Increase	547	
Number of pupils to a teacher on enrollment		44
Same as last year.		
Number of pupils to a teacher on average attendance		37
Increase	1	
Percentage of attendance on enrollment		84
Increase	2	

*This number does not include 18 pupils, 4 boys and 14 girls, in the Colored High and Grammar School.

Percentage of attendance in Baltimore City College		92.5
Increase	.2	
Percentage of attendance in Eastern Female High School		91
Same as last year.		
Percentage of attendance in Western Female High School		92.8
Increase	.7	
Percentage of attendance in Male Grammar Schools		87
Increase	1.4	
Percentage of attendance in Female Grammar Schools		85.2
Increase	2.5	
Percentage of attendance in "Public Schools"		91.75
Increase	2.35	
Percentage of attendance in Male Primary Schools		82.9
Increase	2.9	
Percentage of attendance in Female Primary Schools		80.4
Increase	2.4	
Percentage of attendance in Colored Schools		79
Increase	2.4	
Number of pupils to a teacher on enrollment in Baltimore City College.		42
Decrease	.57	

Number of pupils to a teacher on enrollment in Eastern Female High School		39.5
Increase	2.4	
Number of pupils to a teacher on enrollment in Western Female High School		43
Decrease	7.25	
Number of pupils to a teacher on enrollment in Grammar Schools		41
Same as last year.		
Number of pupils to a teacher on enrollment in "Public Schools"		42
Decrease	2.	
Number of pupils to a teacher on enrollment in Primary Schools		46
Increase	1.4	
Number of pupils to a teacher on enrollment in Colored Schools		47
Increase	1	
Number of pupils to a teacher on average attendance in Grammar Schools.		35
Increase	.5	
Number of pupils to a teacher in average attendance in "Public Schools."		39
Same as last year.		
Number of pupils to a teacher in average attendance in Primary Schools.		38
Increase	2.8	
Number of pupils to a teacher on average attendance in Colored Schools		37
Increase	1	

The statistics for the year show an increase in every department of the schools. The increase in the High Schools is 60, in the Grammar Schools 62, in the Public Schools 221, in the Primary Schools 1,000, in the Colored Schools 547, and in the number on roll Nov. 20th, it is 1,879. The increase in the number of different pupils attending school during the year, 599, being small in comparison with that of former years, is evidence, from the manner in which this number is ascertained in our reports, that there have been fewer changes, on the part of pupils, from one school to another during the year 1883 than has heretofore been the case. A false notion exists among some that a pupil who is not getting on well in one school is benefited by being permitted to go to another. Experience shows that a pupil of this kind, for his own good, should be required by his parents to conduct himself to the satisfaction of his teacher. This acknowledgment of the competency of a teacher on the part of parents is seldom misplaced, and almost invariably results in the improvement of their children. The history of boys who have been allowed to migrate from one school to another under such circumstances shows that such a plan is subversive of discipline, and opposed to the best interests of refractory pupils. Parents generally see this matter in its proper light and understand that for their children's good it is necessary to sustain those placed over them to instruct them. When trouble occurs between a pupil and a teacher, if the teacher is right, in the interest of both school and pupil, he should be sustained, but if he is wrong, the pupil should not be transferred to another school, but the teacher should

be reprimanded, or displaced if the cause is sufficient to require it. In most cases of this kind coming under my observation the teacher has been right and endeavoring to regulate the conduct of the pupil as he is required to do by the rules of the Board. The large increase in the number of pupils attending Primary Schools, 1,000; the Public Schools, 221; and the Colored Schools, 547; shows the wisdom of the step taken by the Board this year in arranging the work of the Primary Schools for six instead of for five grades—a plan which has been recommended to the Board for several years, but not adopted until the latter part of 1882.

SCHOOL ACCOMMODATIONS.

All of the Grammar Schools have buildings which are comparatively new, and ample for their convenience, except No. 6, No. 11, No. 15, No. 18 and No. 19. One of the classes of Male Grammar School No. 6, on account of the lack of space in the main building, has to be instructed in a rented room on Pennsylvania avenue.

A new building for Grammar School No. 11 is in the course of erection on the site of the old one, which will supply this school with necessary accommodations.

Grammar School No. 15 is overcrowded in both departments, and the needs of the schools on both floors are such as to demand the enlargement of the building or some other provision for the excess of pupils over the provided accommodations. No. 18 Grammar School, in this neighborhood, has not a sufficient number of pupils for six teachers in either

department. If the Local Committees on Grammar Schools No. 6, No. 15 and No. 1, in granting permits to new pupils, would send them to No. 18 when they live as near that school as to either of the others mentioned, No. 18 would be speedily filled up, and No. 15 and No. 6 relieved of some of their excess. The Northwestern section is rapidly increasing in population, and adequate relief for No. 15 can only be gotten by the establishment of an additional grammar school at a point about equidistant from No. 15, No. 6 and No. 21.

The building, No. 19, occupied by four schools, on Park avenue, near Preston street, is not a suitable one. On account of the bad lighting and smallness of some of the rooms, parents in the neighborhood are unwilling to send their children to the Male Grammar and the Male Primary Schools located at this point. The portions of the building used by these two schools are of such a character as to prevent their growth, and it is very necessary that proper steps should be taken to supply parents living in this locality with convenient and suitable school facilities.

Public School No. 3 is still overcrowded, and its teachers work under great disadvantages. One of the classes has to be instructed in Primary School No. 7. Since the opening of this school it has admitted many pupils who would have otherwise attended Grammar School No. 3, or Grammar School No. 13, which are situated not very far from it, and unless something is done for their relief these schools will greatly decrease in numbers and usefulness. The buildings occupied by these two Grammar Schools

are comparatively new, and it is in the interests of economy that some of the excess at Public School No. 3 should be sent to them. The seating capacity of Public School No. 3 should be definitely ascertained, and after as many pupils have been enrolled as the building will comfortably accommodate, other pupils applying for admission should be sent to schools in the neighborhood.

In order to provide buildings intelligently and economically for the use of the school population of the city, it is necessary to enforce strictly the rule of the Board requiring pupils to attend the school nearest their homes, and also to fix definitely the seating capacity of each building. When new buildings are opened pupils legitimately belonging to other schools flock to and overcrowd them, and the space already provided for them, in their own neighborhood, is left unoccupied. Much school-space, supplied at great expense to the city, is in this way rendered useless. When pupils live at convenient distances from school their parents may be more promptly communicated with by the teachers and their coöperation secured.

The building occupied by Public School No. 5 does not afford sufficient accommodations for the school. Some of the classes have to be taught in other school buildings in the neighborhood. The eight rooms in the west end of the building, four on the upper and four on the lower floor, are too small for class rooms, and some of them are badly ventilated. If for any cause it became necessary to move the pupils quickly out of the building, great difficulty would be experienced in getting the pupils out of these rooms on account of their bad arrangement.

The building, occupied by the Colored High and Grammar School and Male Colored School No. 1, is not a suitable one in scarcely any respect. It is not well arranged, and some of the rooms are too small and very badly lighted. In some of the rooms, on the lower floor, it is scarcely possible to see sufficiently well to read on cloudy days. If, in case of fire or for any other cause, it became necessary to move the children quickly out of the building, great difficulty would be experienced on account of the narrow stairway down which pupils on the third floor have to pass in getting out of the building.

Female Grammar School No. 16 has greatly increased in numbers and efficiency since it has been furnished with a new building. In the old one, the school consisted of only pupils enough for two teachers, now the number of pupils is such as to require the services of six teachers. The success of this experiment is evidence, if any were needed, of the influence a suitable and attractive building exerts upon parents in inducing them to send their children to school. The pupils are not only gotten into the schools by providing such buildings, but the influence of a neat, well-appointed building upon the children is exceedingly refining in its effect. Where no compulsory law exists, this is a potent means of attracting the very class of children to the schools that they are intended to benefit. It is a subject for congratulation that the Primary Schools are beginning to receive such attention and provision as their importance and needs demand. They are not so well supplied with buildings as the other schools of the city are, and it is to be hoped that the movement

begun in supplying the school at Locust Point with adequate and suitable accommodations may be kept up until all the Primary Schools are provided with first-class houses.

The money necessary to furnish an attractive building, in place of the old and too small one, at Canton, would be well invested in supplying No. 24 Primary School, located there, with a better building,—the one occupied at present, consisting of only three rooms for each department, is not only too small to permit the growth of the school, but it is old, unattractive, and does not meet the requirements of the neighborhood. For the same reason, Primary Schools No. 8, No. 11, No. 23, No. 29, and Male Primary No. 19 should be supplied with more inviting, convenient, and ample accommodations. If they were rebuilt upon the plan of Female Grammar School No. 16, to consist of two stories, the number of pupils attending them would be greatly increased, and the teachers would have greater advantages for instruction.

Within the last few years many new dwellings have been erected in the northern section, and it is now necessary to establish schools for the convenience of pupils living in this part of the city.

I desire again to call attention to the unfitness of the buildings occupied by No. 11 and No. 23 Primary Schools. That occupied by No. 11, on Schroeder and Pierce streets, is not fit for the use of the school. It should be abandoned, and a suitable one erected northwest of its present location, where it would afford needed school accommodations to children living in the

northwestern section, which is rapidly increasing in population, and where, at the same time, it would relieve No. 15 Primary School, which is now full and cannot receive pupils applying for admission on account of the lack of room.

The building now in use by No. 23 Primary School, on Gough and Wolfe streets, is considered unsafe, and is not constructed so as to afford the children in its vicinity suitable or sufficient accommodations. Pupils properly belonging to this school now help to overcrowd No. 6 Primary School in the neighborhood, and parents refuse to send their children to it on account of its unhealthy and overcrowded condition. This has been the case for a long time. The local committees on the school have again and again called attention to these facts and asked for a new building.

The portion of the city south of Pratt street and east of Broadway is not supplied with sufficient Primary School accommodations, and it is highly important that proper steps should be taken to furnish parents living in this section with the necessary means of giving their children a Primary School education.

The Primary Schools should be liberally supplied with all that is necessary for their efficient management and growth. Nearly two-thirds of the pupils attending our schools receive instruction in them. Considering this, together with the fact that here the foundation of their training is laid, and that many pupils finish their education in them, it is evident that these schools should receive the most of our care and attention. They should be supplied with every convenience,

so that all the children of proper age in the city might be induced to avail themselves of their influence. As they are equipped, organized and conducted so will our system be. They are the vital part, and their improvement or decline will in the greatest degree affect the whole. They should be supplied with inviting school buildings, *conveniently located*, suitably arranged and furnished, and experienced, well-paid teachers, who may rest assured of their retention so long as they continue efficient.

It is again recommended that a "model building," constructed upon the best scientific principles in regard to the arrangement and size of class-rooms, heating, lighting, and ventilation be adopted by the Board, and that all new buildings be constructed in accordance therewith. By an inspection of some of our recently constructed buildings, it can be seen that an arrangement of this kind would relieve the city from much unnecessary expense, and secure more suitable buildings for the use of the schools. The Chairman of the London School Board affirms that, the permanent architect's department, so far from being an extravagance, as was predicted, entails less expense than open competition, with the further advantage that "experience of all suggestions of proved value is accumulated and applied in future designs." The experience acquired by the Chairman of the Committee on Buildings and by the Inspector of Buildings, would be of great benefit to the city, if the plan mentioned were adopted, so that their suggestions of proved value might be accumulated and applied in the construction of new buildings. The School Boards of most large cities have in their employ

a Superintendent of Buildings, who is charged with the duty of designing and superintending the erection of new buildings, and of attending to the repairs, etc., of the buildings under the control of the Board. If we had an efficient officer of this sort, such a blunder as was made when the College was designed and built would not occur, the schools would be supplied with more suitable buildings, and the city would be relieved from much unnecessary expense.

DISCIPLINE.

The discipline of the schools is good, and is maintained almost entirely without the use of corporal punishment. The influence of the teachers, and the assistance of parents, enable the principals to conduct their schools without the use of the rod, except in rare cases. The Committee on Discipline is charged with the duty of adjusting difficulties arising between parents and principals on account of the infliction of punishment of this kind. Few cases came before the committee for its consideration during the year, and in each the action of the principal was sustained. The Board, by its rules, allows only the principal to inflict such punishment, and requires a full account of each case to be made to the Board, in a bi-weekly report. Although this kind of punishment is permitted, as it should be—for in the most extreme cases, all other means having failed, it is in the opinion of the best and most humane educators salutary and indispensably necessary, and its administration urged by many parents—yet, the Board, by all the means in its power, endeavors to prevent its frequent, hasty, and injudicious use. The mere fact

that such punishment may be resorted to, if circumstances require it, acts as a restraint upon some pupils who would otherwise be unmanageable. Some of the principals of the colored schools manage well almost without its use, and this plan experience shows is a much better one than that of frequently using this kind of punishment. Parents generally understand the necessity for their coöperation with the teachers and do all that is necessary to make their children comply with the rules of the schools. This is especially the case with German parents, and the least so with Colored parents. It is gratifying to state, though, that the colored people are arriving at correcter views, through the influence of the teachers, upon this subject, and that their children are consequently receiving more benefit than formerly from the schools. The greatest drawback in the colored schools is the difficulty of securing punctuality and promptness of attendance. Our colored citizens are very persistent in their requests for opportunities to educate their children, yet when they are provided, it is difficult to get parents to avail themselves of them. The lessons of punctuality and obedience are among the most useful ones that a school can teach, and unless pupils are learning them while at school, little good is being accomplished.

OPENING EXERCISES.

At the opening of school, many principals adopt the plan of occupying about ten minutes in hearing the pupils of the different grades repeat, individually, short, well selected gems from prose or poetry. These exercises are very interesting and instructive to the children, as

they improve their language, memory, and elocution, while their minds are stored with many valuable gems of literature, and a taste for the best models our language affords is insensibly acquired. Declamation and the recitation of longer selections, on the part of the more advanced scholars, are also practised once a week in some of the schools.

LARGE CLASSES.

In most of the schools none of the classes exceed fifty pupils on roll, but in a few, some of the lower grade teachers are required to instruct classes ranging from fifty to seventy pupils, and in rare cases eighty. The number of pupils (fifty, on roll,) a teacher is expected to instruct by the rules relating to the appointment of teachers is too large, and when it is increased to between fifty and seventy-five, good work cannot be expected. When the course of study prepared for the Grammar Schools about a year ago was issued, the *maximum* number of pupils to a teacher was stated to be sixty, notwithstanding this, occasionally it is found to be the case that a teacher is required to instruct a class of over sixty, this is found too in large schools in which the number of teachers is such that the exercise of judgment would enable the principal to arrange the school so that no teacher would have a class of over forty-five or fifty pupils. I am glad to state that this is the case in very few schools, and it is hoped that in future it will be the case in none. In the Primary and Grammar Schools the classes of reasonable size in charge of the lower grade teachers are found in much better condition than those of teachers whose classes have been too large.

The regulation of the Board directing that at the semi-annual examinations only such pupils shall be examined as are recommended by their teachers, has had a tendency to effect a better grading of the schools. The proper grading of a school is one of the best evidences of efficiency in its management.

TEACHERS' MEETINGS.

During the year the teachers of the different grammar grades have organized monthly meetings, at which the grade work and methods of instruction are explained and discussed with the view of increasing the efficiency of the teachers, and improving the work entrusted to their charge. Many of the teachers deserve great commendation for punctual attendance at these meetings, and for the efforts they have made to improve themselves and their colaborers. And here I desire to express my thanks to them for the zeal they have manifested in this work, and their willing coöperation with me in the efforts I have made to make it a success. The object of these meetings is:

"1. To increase the efficiency of the teachers:

a. By giving a distinct idea of the *true ends* of education;

b. By giving some elementary knowledge of the science of teaching;

c. By illustrating and enforcing the best methods of imparting instruction;

d. By giving a correct idea of what constitutes a good school.

2. To secure a greater degree of uniformity in our work:

   a. In methods of organization, records, teaching, government;

   b. By promoting acquaintance and interchange of ideas among teachers;

   c. By promoting professional knowledge and spirit;

   d. By securing the coöperation of the teachers with the Superintendent.

3. To correct prevailing faults, involving

   a. Waste of time in the movements of pupils in conducting recitations, in repeating work done by previous teachers;

   b. Wrong methods arising from defective knowledge and lack of experience."

The good effected in this way can be seen in the improved work done in the schools, and in the creation of a professional spirit among the teachers and a desire to understand more about the theory and practice of education. Newly appointed teachers, who were formerly required to attend the Saturday Normal Class, receive at these meetings the very instruction they need, that which has a practical bearing upon the actual work they are daily performing in the class-room. The great advantage they possess over the Saturday Normal Class is that, as all the teachers of the grade come together, those of experience and skill are able to give more practical information of the work of the grade to teachers of less skill and experience than can be gotten in any other way. Notwithstanding the fact that these meetings are of great service in rendering

our corps of teachers more efficient, yet a Training School for teachers would be of great benefit to the system. At small expense there might be organized in the building occupied by Male Grammar School No. 1, on Greene and Fayette streets, a school in which candidates for places as teachers might be instructed in the theory of teaching, and the four schools located in the two new buildings at this point might be used as Model Schools in which the practical work of teaching might be observed and learned.

SUPPLEMENTARY READING.

The attention of the Board is again called to the necessity for supplying the teachers of the Primary and Grammar Schools with additional facilities for teaching reading. The number of readers on the list is seven, while there are twelve grades in the Primary and Grammar Schools. This necessitates the using of the same book in two grades. The American Educational series is used in the Primary Schools, the first reader in the fifth and fourth grades, the second in the third and second grades, the third in the first grade. This only gives the fifth grade twenty-seven pages of reading matter, the fourth thirty-two pages, the third sixty-four pages, the second sixty-eight pages, and the first one hundred and sixty-two pages.

In the Grammar Schools, Newell's Readers are used; the third reader is used in the sixth and fifth grades, the fourth in the fourth and third grades, the fifth in the second grade, and the sixth in first grade. It is obvious that such a limited supply of reading does not afford adequate means for giving proper

instruction in this most important study. In many cases the teachers have supplied additional reading matter at their own expense, finding it impossible to induce pupils to take interest in books that they have repeatedly read, and which many of them know by heart. It would be well to put several series of readers upon the list of books for the use of Primary and Grammar Schools, that the principals might obtain a sufficient supply of reading to have the subject taught properly.

COURSE OF STUDY.

Since the last report was submitted, the work of the grades has been carefully revised and rendered more suitable to the wants of the schools. Prominence has been given to the idea of making the work more practical and thorough without impairing its disciplinary character—the mind is trained in logical thinking processes, while at the same time preparation is being made for the actual business of life. Thoroughness in the fundamental rules of arithmetic, both written and mental, is much more to be desired than too long a course imperfectly mastered. In English much more is done in synthesis than in analysis. Pupils in the Primary and Grammar grades acquire a correct use of language, both spoken and written, more by talking and writing about subjects with which they are conversant than by analysing sentences and parsing. Language at this stage is acquired by practice rather than by abstruse and partially understood criticism. Composition is made an important feature of the work in language in all the grades—pupils being required to write out in order such ideas as come up in the course

of study. The mere ability to parse, or to repeat the contents of a grammar, by no means insures even an approximately correct use of language. English grammar cannot be entirely abolished from the course, as it is necessary to know the parts of speech, the declension of nouns and pronouns, the comparison of adjectives and adverbs, the conjugation of verbs, the rules of syntax, and to get some practice in their application and in the correction of false syntax. The last is much more serviceably accomplished by requiring pupils in the course of recitation to use correct forms both in speaking and in writing than by going outside to hunt up incorrect expressions for theoretical instruction in language. J. P. F. Richter says in his Levana: "A child five years old understands the words 'but,' 'indeed,' 'now,' 'on the contrary,' 'certainly;' but, if you desire an explanation of them ask the father, not the child. The word 'indeed' would puzzle a little philosopher."

Map-drawing is taught in connection with the work of each grade in geography, and effects a better comprehension of the subject, and adds greatly to its interest and usefulness. Pupils in the sixth grade are able to go to the black-board and draw a rough sketch of the map of North America, locating its political divisions, most prominent mountains, rivers, bays, etc., and to tell something about the various divisions as to their inhabitants, climate, soil, history, and productions. In the reading-lessons whenever places are mentioned, their geographical positions are noted, not only that the lesson may be understood, but also for the purpose of habituating pupils to hunt up inform-

ation about what they read. If this plan is followed throughout all the grades in reading, it is surprising to see how much geography is incidentally learned, while the habit is acquired of looking up correlative information in reading, a habit which is so essential to a successful accomplishment of the subject. No subject is of so much importance in the course as intelligent reading. Without it lessons cannot be learned. "All the best cultivation of a child's mind is obtained by the child's own exertion, and a master's success may be measured by the degree in which he can bring his scholars to make such exertions absolutely without aid." While teachers do a great deal in helping those under their charge over the hard places, by questioning with the view of developing the subject, etc., yet among sound educators it is agreed that pupils should be aroused to self-activity and led to acquire knowledge without assistance. Much of the poor teaching done now-a-days is due to the fact that pupils are "crammed" with the text merely, instead of being led to acquire knowledge by intelligent direction, study, and questioning. The latter plan leads to intelligent, robust thinking, and continuous sure progress, in mental strength, self-reliance, and the acquisition of knowledge incidentally, while the former succeeds in over exercising the memory and in cultivating mere superficiality and conceit. Thorough instruction in reading not only begets the ability to get the thoughts expressed in the printed page, and to utter them so as to give their sense, but as the pupil is thrown in contact with the most correct forms of expression it cultivates the eye and ear in recognizing them—in fact this with conversation constitutes the most effective language

teaching, and should be systematically and unremittingly pursued throughout the primary and grammar grades. A pupil says, or writes, "I have done these examples," instead of, "I has done them examples," not because the grammar tells him that a verb must agree with its subject, and that a pronoun cannot be used to qualify a noun, but because the latter expression does not *sound* right when spoken, or *look* right when written. The cultivation of the correct appearance and sound of language, is the proper sort of grammar at this stage, not technical grammar. Reading, in the readers, and in the other books studied in the grades,—for books upon all subjects must be used by reading them—furnishes daily the means of cultivating the appearance and sound of correct language. By teaching reading so as to get the pupils to understand what they read, a taste for good reading is formed also, which induces them to read wholesome books rather than the pernicious trash which is thrown broadcast before the youth of the land. Our teachers are looking forward with eagerness to the Free Libraries soon to be opened for the use of the public through the munificence of our fellow-citizen, Enoch Pratt, Esq., for a supply of instructive and useful reading books.

Drawing taught in accordance with the plans laid down in the text books we use upon the subject not only cultivate the hand and eye, but works in harmony with and supplements the course in Arithmetic, Geography, and Language. The pupil who is studying fractions gets a practical illustration of the lesson in Arithmetic when he learns to divide lines into equal parts, and to lay off, for instance, a line equal to

three-fourths of another line. When figures are drawn from dictation the pupil's ability to understand the meaning of language is in the highest degree brought into play.

EDUCATIONAL ADVANTAGES OF BALTIMORE.

The establishment of the Johns Hopkins University has given greater impetus to the cause of education in Baltimore. Persons are attracted to the city as a place of residence on account of its good government, low tax rate, fine climate, unsurpassed market, public libraries, etc., but especially on account of the facilities it affords them for educating their children. At scarcely any expense they have all the advantages for education from a Primary School through the University. Although the University is not a public school, yet the terms of admission are such that scarcely without charge a student may avail himself of its numerous and unsurpassed avantages. We are endeavoring in the regulation of our work to place the public schools in harmonious relations with the University, without impairing their practical character, so that a boy may advance uninterruptedly from the lowest of our public schools through that institution. The influence of the University upon the schools has been unmistakably felt, and will be more and more so as our relations, the one to the other, are gradually perfected. President Gilman has manifested great interest in our schools, and has responded cheerfully and liberally to all the calls we have made upon him. The University lectures in the afternoon have been open to teachers, who desired to attend them—tickets having been furnished upon application. Dr. G. Stanley Hall's lectures upon "Pedagogics"

were well attended by quite a number of teachers, as were Dr. Billings' upon "Hygiene." We are encouraged to anticipate great success from our Manual Training School, recently established, and it is hoped that through the munificence of some of our wealthy citizens, Baltimore in time will have a Polytechnic School to supplement this on the plan of the Massachusetts Institute of Technology at Boston. The problem of adding industrial work to that already done in the Primary and Grammar Schools is a very difficult one to solve, and no plan should be undertaken until the subject has been most maturely and carefully considered, lest the efficiency of those schools may be greatly impaired. But if this sort of training will do all that is claimed for it, its engraftment upon the other schools will not only afford healthy, pleasant, and invigorating exercise, both mental and physical to the boys, but will give them an industrial bent, which will be of inestimable service to Baltimore in developing her manufacturing industries, and inclining boys to trades rather than to what are now called professions. Prof. C. M. Woodward, of St. Louis, says: "I claim as the fruit of manual training, when combined as it always should be, with generous mental and moral training, the following:

1. Larger classes in your grammar and high schools.

2. Greater stability and perfection of character, moral and intellectual.

3. Sounder judgments and more correct estimates of men and things.

4. Better election in the choice of occupations.

5. Higher spiritual and material success.

6. The elevation of many occupations from the realm of brute, unintelligent labor to one requiring and rewarding cultivation and skill.

7. Greater commercial, industrial and intellectual progress.

8. The solution of the vexed labor question.

"Prof. Felix Adler has pointed out, with great force and elegance, the influence of the exercises of the shop upon the formation of character:—'A habit is thus formed of judging things in general according to their intrinsic rather than their superficial qualities. Gradually, and almost insensibly, the analogy of the work performed upon outward objects will be applied to inward experience. A delicate sensibility to true and harmonious relations will be engendered. The pupil can be taught that, in the world of thought, and feeling too, truth and harmony of relation are the sole ends to be sought. He can be exhorted to undergo similar toil, to be prepared for similar failures and disappointments, in order to realize at last something of the same inward perfection which is to be his only and all-sufficient reward. Thus while he is shaping the typical objects which the instructor proposes to him as a task, while he pores silently, persistently, and lovingly over these objects, reaching success by gradual approximation, he is, at the same time, shaping his own character, and a tendency of mind is created from which will eventually result the loftiest and purest morality.'

"'On Thursday, May 3d, Jules Ferry assisted in laying the corner-stone of a school in Vierzon, whose object is the training of artisans. The doctrine was

so strongly advocated by his party,—namely, that all social disturbance may find its correction in education,—was fully expressed in his address. Caste, he said, would vanish when tools were found in the schools alongside of books; the nobleness of manual labor would be perceived, and concord would be spread. The principles common to all handicraft would be taught, so that boys would be able with full knowledge to choose their vocation. Such schools would tend to root out anarchist passions founded on ignorance, to elucidate social problems, to reconcile the masses to social laws, and to prepare the Nation to meet foreign competition.'"

HIGH SCHOOLS.

The College and the Western Female High School are still greatly in need of additional class-rooms. In regard to the character of the instruction given in the College and High Schools, it may be of interest to state that none of the recent graduates who offered at the examinations of applicants for positions as teachers, held during the year, failed to obtain certificates. Several young gentlemen, who received instruction in the College, passed the examination for matriculation, and entered the Johns Hopkins University. The Female High Schools educate most of our teachers, and upon comparing the course of study pursued in them, with that provided for the young men in the College, it is at once apparent that the young ladies do not have advantages equivalent to those furnished the young men. In addition to what is taught in the High Schools, the boys attend-

ing the College have instruction in Latin, Greek, Higher Mathematics, and greater facilities for experimenting in chemistry and physics. Up to the time that the boys and girls enter these schools there is little difference in their instruction, but upon entering the High Schools and the College the boys are provided with a much more extensive course. There is no good reason for the existence of such a great difference between the two courses of study. In view of the fact that many of the graduates of the High Schools become teachers in our schools, it is in the best interests of the schools to give the young ladies all the facilities necessary for their improvement. Some persons are averse to the study of the ancient languages, yet the great weight of authority is decidedly in their favor, and in my opinion, our High Schools would turn out much stronger teachers both as to training and information were the course of study pursued in them made as comprehensive as that of the College. By making the studies referred to elective, some or all of them might be advantageously introduced without increasing the demands upon the efforts of the pupils, or adding greatly to the cost of instruction. Considering the liberality of the city in affording her young people opportunities for education, it is but fair to demand high qualifications on the part of those who desire to teach. Those imperfectly educated have no right to expect employment as teachers, when they have failed to obtain the benefit of the schools in order to fit themselves thoroughly for their work. It is too frequently the case, in the selection of teachers, that our best graduates are overlooked for those who have more influential friends,

but inferior educational qualifications. In the interest of the children taught in the schools, every appointee should be the best on the list of eligible applicants, and ward limits should have nothing to do with determining their selection.

I wish to express my thanks to the officers of the Board, and to the teachers for hearty coöperation in all measures proposed for the good of the schools. Especial acknowledgment is due the Principals for valuable suggestions, and assistance in preparing the Course of Study. With thanks to the members of the Board for their support and uniform kindness and courtesy, this report is respectfully submitted.

HENRY A. WISE,
Superintendent.

TABLES

Accompanying Superintendent's Report,

SHOWING THE

Number of Pay Pupils, Number of Free Pupils, Number on Roll, Average Attendance, Percentage of Attendance, Number of Different Pupils in School during the year ending November 20, 1883, and Number of Teachers.

SCHOOLS.	Number of Pay Pupils.	Number of Free Pupils.	Number on Roll Nov. 20th.	Average Attendance.	Percentage of Attendance.	Number in School during Year.	Number of Teachers.
Baltimore City College	546	87	633	586	92.5	898	15
Eastern Female High School	245	150	395	360	91.	517	14
Western Female High School	498	111	609	565	92.8	845	10
	1289	348	1637	1511	92.3	2260	39
Male Grammar No. 1	188	109	292	258	89.	425	8
" " " 2	137	195	332	298	91.	467	8
" " " 3	48	118	166	148	89.	266	5
" " " 4	115	122	237	218	92.	327	6
" " " 5	21	164	185	144	78.	269	5
" " " 6	293	73	366	307	87.	515	9
" " " 7	51	169	220	191	90.	293	6
" " " 8	108	198	306	276	91.6	429	8
" " " 9	47	69	116	90	84.	177	3
" " " 10	58	193	251	222	88.	347	6
" " " 11	53	182	235	204	86.	331	6
" " " 12	42	268	310	281	91.	422	7
" " " 13	69	147	216	183	84.7	311	5
" " " 15	310	168	478	432	93.	676	11
" " " 17	90	98	188	163	88.	257	5
" " " 18	62	132	194	156	81.	258	5
" " " 19	166	80	246	210	85.4	365	6
" " " 20	86	212	298	257	86.	390	7
" " " 21	148	117	265	228	86.	385	6
	2087	2814	4901	4266	87.	6904	122

FEMALE GRAMMAR AND PUBLIC SCHOOLS.

Schools.	Number of Pay Pupils.	Number of Free Pupils.	Number on Roll Nov. 20th.	Average Attendance.	Percentage of Attendance.	Number in School during Year.	Number of Teachers.
Female Grammar No. 1	271	171	442	379	85.5	634	10
" " " 2	88	23	318	274	86.	450	8
" " " 3	49	128	177	148	83.	249	5
" " " 4	106	142	248	202	82.	368	6
" " " 5	18	239	257	202	79.	323	6
" " " 6	289	105	394	340	87.	539	9
" " " 7	55	130	185	166	90.	268	5
" " " 8	150	229	379	324	85.	516	9
" " " 9	30	77	107	96	89.	174	3
" " " 10	55	206	261	225	86.	361	6
" " " 11	61	242	303	257	85.	423	7
" " " 12	31	219	250	221	88.	372	6
" " " 13	147	186	333	293	88.	464	8
" " " 15	270	210	480	433	90.	687	11
" " " 16	36	209	245	188	77.	333	5
" " " 17	116	131	247	215	87.	348	6
" " " 18	77	132	209	171	81.	294	5
" " " 19	98	81	179	142	80.	281	4
" " " 20	50	300	350	305	90.	456	8
" " " 21	216	177	393	326	83.	541	8
	2213	3544	5757	4907	85.2	8081	135
Public School No. 1	493	64	557	483	87.	685	13
" " " 2	670	.....	670	643	96.	921	16
" " " 3	1067	23	1090	1033	94.75	1430	26
" " " 4	663	61	724	653	92.	925	17
" " " 5	586	242	828	738	89.	1074	19
	3479	390	3869	3550	91.75	5035	91

MALE PRIMARY SCHOOLS.

Schools.	Number of Pay Pupils.	Number of Free Pupils.	Number on Roll Nov. 20th.	Average Attendance.	Percentage of Attendance.	Number in School during Year.	Number of Teachers.
Male Primary No. 1	174	211	385	335	85.	519	9
" " " 2	13	172	185	155	83.	302	5
" " " 3	30	245	275	219	79.	420	6
" " " 4	76	194	270	221	82.	398	6
" " " 5	16	430	446	373	84.	501	10
" " " 6	67	275	342	291	86.	451	7
" " " 7	32	135	167	141	85.	245	4
" " " 8	17	138	155	134	86.	231	4
" " " 9	16	131	147	107	73.	225	3
" " " 10	21	195	216	186	86.	324	5
" " " 11	26	190	216	182	88.	323	5
" " " 12	26	292	318	280	88.	488	7
" " " 13	7	204	211	168	84.	316	5
" " " 14	203	46	249	204	82.	371	5
" " " 15	234	210	444	367	86.	575	9
" " " 16	9	333	342	284	83.	454	7
" " " 17	22	342	364	297	82.	544	8
" " " 18	138	129	267	221	83.	418	6
" " " 19	47	114	161	136	85.	258	4
" " " 20	52	362	414	337	81.	540	9
" " " 21	91	230	321	266	83.	477	7
" " " 22	3	247	250	232	93.	347	6
" " " 23	59	242	301	243	80.	413	6
" " " 24	24	148	172	140	92.	248	4
" " " 25	23	224	247	189	77.	298	5
" " " 26	24	196	220	182	82.	299	5
" " " 27	105	206	311	264	84.	426	7
" " " 28	16	296	312	240	78.	424	6
" " " 29	26	140	166	138	83.	242	4
" " " 30	64	358	422	357	85.	626	9
	1661	6635	8296	6889	82.9	11703	183

FEMALE PRIMARY SCHOOLS.

Schools.	Number of Pay Pupils.	Number of Free Pupils.	Number on Roll Nov. 20th.	Average Attendance.	Percentage of Attendance.	Number in School during Year.	Number of Teachers.
Female Primary No. 1.	239	178	417	348	83.	610	9
" " " 2.	8	185	193	156	88.	299	5
" " " 3.	35	226	261	202	77.	388	5
" " " 4.	68	189	257	197	77.	352	5
" " " 5.	18	496	514	420	82.	716	11
" " " 6.	67	319	386	322	84.	514	8
" " " 7.	26	149	175	134	77.	362	4
" " " 8.	19	145	164	124	76.	240	3
" " " 9.	20	128	148	111	75.	240	3
" " " 10.	28	183	211	182	86.	284	5
" " " 11.	59	191	250	206	82.	347	6
" " " 12.	13	355	368	299	81.	584	8
" " " 13.	9	205	214	178	83.	302	5
" " " 14	88	46	134	114	86.	232	3
" " " 15.	142	290	432	373	86.	586	9
" " " 16.	9	284	293	222	76.	427	6
" " " 17.	48	282	330	267	81.	481	7
" " " 18.	116	134	250	196	78.	365	5
" " " 19.	51	138	189	161	86.	277	4
" " " 20.	86	258	344	277	89.	493	7
" " " 21.	76	257	333	265	80.	463	7
" " " 22.	10	244	254	220	86.	359	6
" " " 23.	74	217	291	242	83.	411	6
" " " 24.	25	140	165	124	75.	228	3
" " " 25.	17	220	237	158	67.	318	4
" " " 26.	28	186	214	186	87.	301	5
" " " 27.	92	208	300	241	80.	414	6
" " " 28.	17	278	295	238	81.	408	6
" " " 29.	17	160	177	135	90.	253	4
" " " 30.	86	343	429	340	79.	593	9
	1591	6634	8225	6638	80.4	11847	174

COLORED SCHOOLS.

Schools.	Number of Pay Pupils.	Number of Free Pupils.	Number on Roll Nov. 20th.	Average Attendance.	Percentage of Attendance.	Number in School during Year.	Number of Teachers.
Colored High and Grammar	16	408	424	370	91.	617	10
Male Colored No. 1	0	136	136	99	73.	222	3
" " " 2	0	316	316	233	74.	425	7
" " " 3	0	321	321	285	90.	432	7
" " " 4	5	371	376	313	86.	505	8
" " " 5	2	206	208	170	82.	294	5
" " " 6	0	446	446	313	70.	703	9
" " " 7	1	484	485	398	92.	654	11
" " " 8	0	307	307	229	75.	409	6
Female " " 1	0	255	255	182	72.	359	5
" " " 2	2	360	362	292	81.	510	8
" " " 3	0	378	378	300	80.	505	7
" " " 4	2	395	397	289	73.	508	8
" " " 7	2	448	450	367	89.	668	10
	30	4831	4861	3840	79.	6811	104

SUMMARY STATEMENT,

Showing the Number of Schools, Teachers, Pay Pupils, Free Pupils, on Roll November 20th, 1883, Average Attendance, Percentage of Attendance, and Number of Different Pupils in School during the Year.

SCHOOLS.	No. of Schools.	No. of Teachers.	Number of Pay Pupils.	Number of Free Pupils.	Number on Roll Nov. 20th.	Average Attendance.	Percentage of Attendance.	Number of Pupils in School during the Year.
Baltimore City College.	1	15	546	87	633	586	92.5	898
East. Fem. High School.	1	10	245	150	395	360	91.	517
West. Fem. High School.	1	14	498	111	609	565	92.8	845
Male Grammar Schools...	19	122	2,087	2,814	4,901	4,266	87.	6,904
Fem. Grammar Schools.	20	135	2,213	3,544	5,757	4,907	85.2	8,081
Public Schools	5	91	3,479	390	3,869	3,559	91.75	5,035
Male Primary Schools....	30	183	1,661	6,635	8,296	6,889	82.9	11,703
Female Primary Schools.	30	174	1,591	6,634	8,225	6,638	80.4	11,847
Colored Schools	14	104	30	4,831	4,861	3,840	79.	6,811
Music Teachers	...	3	.....	.....	.....	.....	.....	.....
Drawing Teachers	...	4	.....	.....	.....	.....	.....	.....
	121	855	12,350	25,196	37,546	31,601	84.	52,611

Deduct {	No. of pupils promoted to High Schools and College	758	
	" " " " Grammar Schools	3,007	
			3,765
Actual number of pupils in school during the year			48,876

NUMBER OF PUPILS

In High, Grammar and Primary Schools, November 20, 1883.

Schools.	Grammar School Pupils.		Primary School Pupils.		Total.
	Males.	Females.	Males.	Females.	
Public School No. 1	120	114	170	153	557
" " " 2	86	111	207	266	670
" " " 3	328	289	245	228	1,090
" " " 4	147	107	278	192	724
" " " 5	181	136	284	227	828
Female Grammar No. 16	12	17	109	107	245
Col. High & Gram. School.	182	224	.....	.....	*406
Male Colored No. 1	28	.....	108	.....	136
" " " 2	42	.....	274	.....	316
" " " 3	36	.....	285	.....	321
" " " 4	47	.....	329	.....	376
" " " 5	11	10	103	84	208
" " " 6	23	19	197	208	446
" " " 7	49	.....	436	.....	485
" " " 8	9	16	110	172	307
Female Colored No. 1	.....	47	.....	208	255
" " " 2	.....	58	.....	304	362
" " " 3	.....	79	.....	299	378
" " " 4	.....	40	.....	357	397
" " " 7	.....	42	.....	408	450
	1,300	1,309	3,135	3,213	8,957
No. in Grammar Schools.	4,901	5,512	.....	.....	10,413
No. in Primary Schools...	.....	.....	8,296	8,225	16,521
	6,201	6,821	11,431	11,438	35,891

*Eighteen High School Pupils, 14 girls and 4 boys, are not included in this number.

	Males.	Females.	Total.
Number of High School Pupils	637	1,018	1,655
" " Grammar School Pupils	6,201	6,821	13,022
" " Primary School Pupils	11,431	11,438	22,869
Total No. of Pupils on Roll Nov. 20, 1883	18,269	19,277	37,546

DIFFERENT GRADES OF SCHOOLS COMPARED.

Number of pupils in High Schools during	1883	1,637
" " " " " "	1882	1,570
Increase in 1883		67
Number of pupils in Grammar Schools during	1883	10,658
" " " " " "	1882	10,586
Increase in 1883		72
Number of Primary School pupils during	1883	16,521
" " " " " "	1882	15,521
Increase in 1883		1,000
Number of Public School pupils during	1883	3,869
" " " " " "	1882	3,648
Increase in 1883		221
Number of pupils in Colored Schools in	1883	4,861
" " " " " " "	1882	4,314
Increase in 1883		547
Total increase during 1883		1,907

TABLE

Showing the Number of Pupils and Teachers in the Public Schools on the last day of each Fiscal Year, from the year 1829, when the first Public School was opened, to the year 1883, inclusive.

Date.	Teachers.	Pupils.	Date.	Teachers.	Pupils.
1829	3	269	1857	246	11,759
1830	5	402	1858	270	12,263
1831	5	627	1859	271	12,419
1832	5	640	1860	302	14,156
1833	8	544	1861	317	13,952
1834	8	859	1862	319	14,382
1835	8	867	1863	350	15,661
1836	8	814	1864	358	16,086
1837	8	659	1865	377	16,523
1838	8	675	1866	411	17,967
1839	8	1,126	1867	513	18,896
1840	16	1,834	1868	555	20,591
1841	22	2,539	1869	558	23,159
1842	27	2,471	1870	571	24,673
1843	28	2,669	1871	578	25,357
1844	30	3,366	1872	614	26,375
1845	50	4,313	1873	624	28,329
1846	64	5,017	1874	661	29,108
1847	91	6,439	1875	706	31,356
1848	98	6,699	1876	731	31,404
1849	107	6,763	1877	764	33,946
1850	119	7,093	1878	820	35,288
1851	138	8,011	1879	822	36,505
1852	172	9,081	1880	822	36,337
1853	194	9,447	1881	824	35,630
1854	209	9,717	1882	826	35,639
1855	217	10,913	1883	855	37,546
1856	253	12,946			

EXAMINATION FOR PROMOTION

From Primary to Grammar Schools, January 31st, 1883.

PRIM. SCHOOLS.	Number on Roll.	Number Examined.	Number Passed.	Number Promoted.	PRIM. SCHOOLS.	Number on Roll.	Number Examined.	Number Passed.	Number Promoted.
Male No. 1.....	70	42	39	41	Female No. 1...	79	45	45	45
" " 2.....	26	17	17	17	" " 2...	27	14	13	13
" " 3.....	42	22	18	20	" " 3...	56	29	29	29
" " 4.....	56	24	23	23	" " 4...	39	16	16	16
" " 5.....	49	32	32	32	" " 5...	47	29	28	29
" " 6.....	45	19	19	19	" " 6...	84	27	24	24
" " 7.....	35	17	17	17	" " 7...	44	23	23	23
" " 8.....	33	21	17	17	" " 8...	30	15	12	12
" " 9.....	21	17	17	17	" " 9...	30	11	11	11
" " 10.....	24	20	19	20	" " 10...	28	18	17	17
" " 11.....	35	25	25	25	" " 11...	42	27	24	26
" " 12.....	34	26	23	23	" " 12...	37	35	29	29
" " 13.....	25	16	16	16	" " 13...	31	18	18	18
" " 14.....	57	26	25	25	" " 14...	41	23	23	23
" " 15.....	96	59	56	57	" " 15...	65	46	44	44
" " 16.....	35	24	18	23	" " 16...	45	36	34	36
" " 17.....	61	28	25	25	" " 17...	46	29	23	23
" " 18.....	41	34	35	33	" " 18...	44	26	22	23
" " 19.....	34	17	16	17	" " 19...	9	6	6	6
" " 20.....	26	25	25	25	" " 20...	51	31	31	31
" " 21.....	40	31	30	30	" " 21...	49	34	34	34
" " 22.....	40	35	32	32	" " 22...	36	19	18	18
" " 23.....	49	25	23	23	" " 23...	52	25	22	22
" " 24.....	16	14	14	14	" " 24...	16	10	10	10
" " 25.....	17	17	17	17	" " 25...	23	15	14	14
" " 26.....	35	25	25	25	" " 26...	50	21	16	17
" " 27.....	32	26	26	26	" " 27...	36	22	21	21
" " 28.....	34	17	16	16	" " 28...	41	19	19	19
" " 29.....	29	13	12	12	" " 29...	57	16	16	16
" " 30.....	59	45	42	42	" " 30...	64	37	35	35
Boys.....	1196	759	717	729	Girls.....	1279	722	677	677
Girls.....	1279	722	677	677					
Total.....	2475	1481	1394	1406					

EXAMINATION FOR PROMOTION

From Primary to Grammar Schools, June 21st, 1883.

Prim. Schools	Number on Roll.	Number Examined.	Number Passed.	Number Promoted.	Prim. Schools.	Number on Roll.	Number Examined.	Number Passed.	Number Promoted.
Male No. 1....	56	36	31	31	Female No. 1..	58	33	33	33
" " 2....	25	16	16	16	" " 2..	27	17	13	14
" " 3....	36	23	17	19	" " 3..	42	26	22	23
" " 4....	44	24	22	22	" " 4..	39	20	20	20
" " 5....	45	32	31	32	" " 5..	57	46	46	46
" " 6....	48	34	31	31	" " 6..	80	35	35	35
" " 7....	30	17	13	13	" " 7..	40	23	20	21
" " 8....	37	24	24	24	" " 8..	29	24	21	21
" " 9....	19	18	12	14	" " 9..	17	14	14	14
" " 10....	26	24	11	16	" " 10..	23	13	12	12
" " 11....	28	21	16	18	" " 11..	31	22	19	19
" " 12....	56	45	39	39	" " 12..	32	29	20	20
" " 13....	25	20	19	19	" " 13..	32	21	21	21
" " 14....	60	41	35	37	" " 14..	35	20	17	18
" " 15....	86	56	48	52	" " 15..	62	45	45	45
" " 16....	34	21	19	21	" " 16..	41	28	23	25
" " 17....	56	43	38	38	" " 17..	44	25	23	23
" " 18....	34	25	16	18	" " 18..	47	37	30	34
" " 19....	23	14	12	12	" " 19..	23	19	19	19
" " 20....	40	28	28	28	" " 20..	51	37	37	37
" " 21....	33	23	19	23	" " 21..	38	20	19	19
" " 22....	28	24	18	18	" " 22..	35	19	17	17
" " 23....	37	26	26	26	" " 23..	41	26	23	24
" " 24....	15	14	14	14	" " 24..	20	16	15	16
" " 25....	22	14	14	14	" " 25..	24	16	15	15
" " 26...	29	19	17	19	" " 26..	43	25	21	21
" " 27....	24	23	23	23	" " 27..	35	26	26	26
" " 28....	35	17	17	17	" " 28..	38	19	18	18
" " 29....	23	19	18	18	" " 29..	27	13	13	13
" " 30....	55	37	31	31	" " 30..	57	37	30	30
Boys.....	1159	778	675	703	Girls.....	1168	751	687	699
Girls.....	1168	751	687	699					
Total.....	2327	1529	1362	1402					

	Roll.	Examined.	Passed.	Promoted.
February Examination.....	2475	1481	1394	1406
June "	2327	1529	1362	1402
Total, 1883.....	4802	3010	2756	2808

EXAMINATION FOR PROMOTION

From Primary to Grammar (Colored), February 7th, 1883.

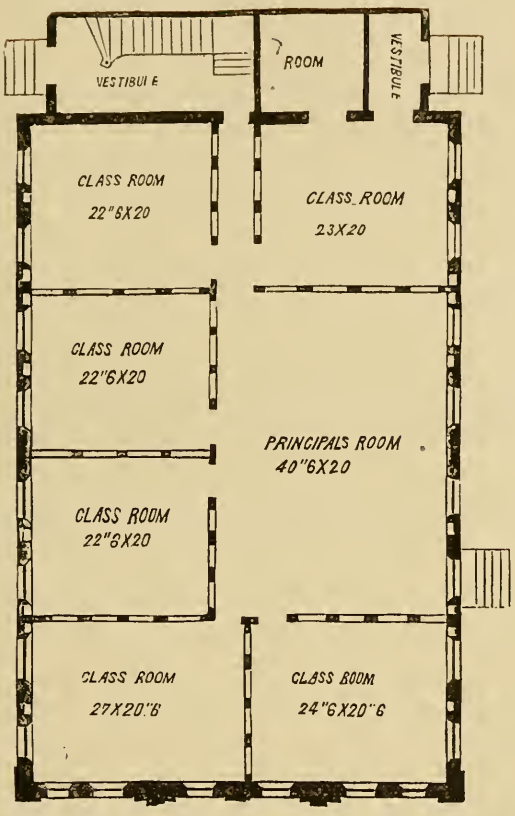
Colored Schools.	Number on Roll.	Number Examined.	Number Passed.	Number Promoted.	Colored Schools.	Number on Roll.	Number Examined.	Number Passed.	Number Promoted.
Male No. 1.....	10	5	3	4	Female No. 1....	9	2	2	2
" " 2.....	15	12	5	8	" " 2....	33	12	11	11
" " 3.....	13	7	5	5	" " 3....	42	13	9	9
" " 4.....	18	18	11	11	" " 4....	15	10	8	8
" " 5.....	3	3	3	3	" " 7....	18	13	13	13
" " 6.....	16	5	4	4					
" " 7.....	12	8	7	7	Girls.....	117	50	43	43
" " 8.....	5	5	5	5	Boys.....	92	63	43	47
Total Males....	92	63	43	47	Total.....	209	113	86	90

June 25, 1883.

Colored Schools.	Number on Roll.	Number Examined.	Number Passed.	Number Promoted.	Colored Schools.	Number on Roll.	Number Examined.	Number Passed.	Number Promoted.
Male No. 1.....	13	4	3	4	Female No. 1....	10	2	1	2
" " 2.....	19	13	8	10	" " 2....	30	15	11	14
" " 3.....	18	10	9	9	" " 3....	24	18	14	14
" " 4.....	17	16	11	11	" " 4....	15	9	6	6
" " 5.....	10	10	10	10	" " 7....	15	9	9	9
" " 6.....	17	6	6	6					
" " 7.....	10	10	8	8	Girls.....	94	53	41	45
" " 8.....	7	7	6	6	Boys.....	111	76	61	64
Total Males....	111	76	61	64	Total.....	205	129	102	109

	Roll.	Examined.	Passed.	Promoted.
February Examination.....	209	113	86	90
June "	205	129	102	109
Total, 1883.....	414	242	188	199

Male and Female Grammar School No. 4, Sharp Street, near Henrietta.



Ground Plan of No. 4.

Report of the Assistant Superintendent.

REPORT.

BALTIMORE, January 1, 1884.

HENRY A. WISE, Esq.,
Superintendent of Public Instruction;

SIR:

In my last report I recommended that the primary school curriculum should be divided into six grades in place of five. This suggestion has been carried into effect, and with the happiest results. Six half-yearly terms, one to each grade, will now carry a diligent pupil through the primary course, without undue pressure, and prepare him for entering upon grammar school work.

A German statesman is reported to have said that whatever is to appear in the life of a nation must first be put in the schools. It may be added that whatever is to appear in the schools must first be put into the primary schools. Primary schools are in fact THE schools of the nation. The higher schools are auxiliary and supplementary. ALL the public schools require and deserve careful attention, but the primary schools demand special consideration:

1st. Because they contain a larger number of pupils than all the other schools taken together. Of the (nearly) 49,000 pupils in attendance, according to the present report, more than 30,000 belong to the primary department.

2d. Because there are thousands of children in the city who obtain no education beyond what they receive in the primary schools. This report shows that only ten per cent. of the primary scholars were promoted to grammar schools during the year. Allowing four years for the primary course, it would thus appear that only forty per cent. of the pupils of the primary schools ever reach the grammar schools; in other words, sixty out of every hundred children on the rolls begin and end their school education in the primary schools.

3d. There is still another reason why the primary schools should obtain the largest share of our consideration. The old proverb says that "What is well begun is half ended." To nothing is this more applicable than to the beginnings of education. If the foundation is imperfect the superstructure will fall into ruin. If a child is well instructed in the rudiments of learning by methods agreeable to nature and philosophy, he may almost be trusted to educate himself afterwards. The right impulse given at the start will carry him a long way in the right direction.

It would seem to be almost an axiom, an axiom certainly to every American citizen, an axiom most certainly to every officer entrusted with the guardianship and direction of the peoples' schools, that the univer-

sal diffusion of sound elementary education is the main purpose of every public school system. For this purpose the people pay their school taxes, and while they are willing that due support be given to the higher schools, they are not willing that the lower schools should be sacrificed or neglected. Yet the contrary opinion is not without advocates, even in quarters where one would look for better things. The late Superintendent of Public Instruction in this city has expressed this opinion with his usual clearness and force in the following words: * * * *

"For my own part, I have no hesitation in averring that of the two extremes, an elementary education universally disseminated to the exclusion of the highly cultured element of society, or general ignorance relieved by the presence of the cultured element, I decidedly prefer the latter. * * * * It is my calm conviction that elementary education universally diffused, without the counteracting influence, the vivifying power of higher education, is a more serious cause of apprehension, and a more pliant ally of agrarian and socialistic evils than stolid, invincible ignorance." * * * *

It is not hard to guess what must be the attitude of that man's mind with regard to elementary education who believes that it requires a counteracting influence. For my part I have no hesitation in averring that "elementary education universally disseminated" needs no "counteracting influence;" but, on the contrary, deserves and demands for its realization the most vigorous efforts of all who have faith in the political

equality of men, and is the ultimate goal to which modern civilization is slowly but persistently marching.

It will be conceded by all except those who look upon elementary education as an evil that requires to be "counteracted," that as a consequence of the fact that more than one-half of our pupils never advance beyond the primary school, the course of primary instruction should be such as will best fit this majority for the active duties of life. Modern improvements in methods of instruction have made it practicable to teach in the first three or four years much more than was formerly thought possible or desirable. On leaving the primary school a child should be able to read the newspaper intelligibly, to write a simple letter without many blunders either in substance or form, and to apply the fundamental rules of arithmetic to ordinary calculations in money with facility and accuracy. This is the practical work that the primary schools can do and ought to do. But to enable them to do it, certain modifications will be needed. I respectfully offer the following suggestions:

1st. The younger and the more ignorant the pupils are, the more they need individual instruction, and the smaller should be the number assigned to a class. Consequently the rule of the Board which allows a principal and an assistant for the first 60 pupils, and an additional assistant for every 40 pupils thereafter in average attendance, should be so construed as to prevent more than 40 pupils being placed in any one class. Under the present ruling it is possible to have 79 pupils in a class, but though this number may be classified they cannot be efficiently taught.

2d. In schools to be hereafter built each class-room should be furnished with forty single desks, and no more pupils admitted when these desks are filled, except as vacancies occur. The long desks for five pupils each now in use in some schools should be summarily abolished. Notwithstanding the efforts that have been made to provide good accommodations for all the primary schools, there still remain some buildings which are anything but creditable to the city, or safe for the children. These houses should be abandoned as soon as new buildings can be erected.

3d. As it is more difficult to teach beginners than those who are more advanced, experienced teachers should be sent to the primary schools. A bright girl, fresh from the High School, will find less difficulty in teaching to grammar school pupils the studies in which she has just graduated than in managing a class of the lowest grade in a primary school. When she has learned by experience something of the art of teaching, she is entitled to promotion to the more difficult work of the primary school.

4th. As a sufficient number of experienced teachers cannot be provided in this way, a Training School for primary teachers should be established in connexion with one of our primary schools. The additional expense need only be the salary of one well-trained teacher, fully acquainted with all modern improvements in primary methods. From this training class substitutes can be obtained when they are wanted, and successful substitutes may be relied on to furnish good, permanent teachers.

5th. It is well known that there are some thousands of children in this city who attend no school, public, private or denominational, and are growing up in such ignorance as can hardly be relieved either by "the presence of the cultured element" or the "counteracting influence, the vivifying power of higher education." If something is not done, and done speedily, to instruct and reclaim these neglected children, the "cultured element" will find to their sorrow that "stolid, invincible ignorance" is no protection against "agrarian and socialistic evils."

I would suggest, for a beginning, that one school for such children be established in each of the four sections of the city, to be known as half-time schools, and to be placed under such control and direction as will encourage those children to come for half a day when they cannot command a full day, and even to come occasionally when their necessities prevent them from attending regularly.

Respectfully submitted,

CHAS. G. EDWARDS,
Assistant Superintendent.

Baltimore City College, Howard Street, opposite Centre.

FORTY-FIFTH ANNUAL REPORT

— OF —

BALTIMORE CITY COLLEGE,

WITH ACCOMPANYING PAPERS

— FOR —

A. D. MDCCCLXXXIII.

COMMITTEE ON BALTIMORE CITY COLLEGE.

JOHN F. HANCOCK, Chairman.

F. G. CONNOLLY, M.D.

ROBERT H. SINCLAIR.

CALVIN J. KING.

JOHN T. MORRIS, *ex-officio.*

HENRY A. WISE, Sup't, *ex-officio.*

FACULTY OF BALTIMORE CITY COLLEGE.

WILLIAM ELLIOTT, Jr., A.M., Ph. D., Principal.
Professor of Higher Mathematics.

A. L. MILLES, B.A.,
Professor of the French Language and Adjunct Professor of Latin.

CHARLES F. RADDATZ,
Professor of the German Language.

POWHATAN CLARKE, M.D.,
Professor of Natural Sciences.

CHARLES C. WIGHT,
Professor of History and English Literature.

RICHARD W. PREECE,
Professor of Drawing.

F. A. SOPER, A.M.,
Professor of Mathematics and Astronomy.

A. Z. HARTMAN, A.M.,
Professor of Latin and Greek.

ALEXANDER HAMILTON,
Adjunct Professor of English and Mathematics.

J. N. HANK, A.M.,
Adjunct Professor of Latin and Greek.

JOSEPH H. ELLIOTT,
Professor of Bookkeeping and Penmanship.

S. F. NORRIS,
Tutor.

G. EMORY MORGAN, A.M.,
Tutor.

A. J. ROBINSON, A.B.,
Tutor.

PHILIP H. FRIESE,
Tutor.

COMMENCEMENT.

The names of the young gentlemen to whom certificates were given at the Commencement in June, 1883, in testimony of their having satisfactorily completed their respective courses of study, are as follows:

I. OF THE FIVE YEARS' COURSE:

BARRETT, WM. L. K.,
BROWNOLD, SAMSON M.,
CUMMINS, EDWIN J.,
EICHELBERGER, WM. S.,
FRANK, SIMON,
GORTON, WM. C. L.,
HANNAH, SAMUEL H.,
HARTOGENSIS, BENJ. H.,
HISKY, T. FOLEY,
HUNT, ARTHUR,
HUNTER, THOMAS J.,
KELLY, WILLIAM H.,
KENLY, WILLIAM L.,
LAMBRIGHT, WILLIAM S.,
LLOYD, JOHN HOWARD,
LOWENBACH, JOSEPH,
MACCADDIN, WILLIAM B.,
PRICE, HARRY W.,
SMITH, WILLIAM F.,
TAYLOR, EDWARD FISHER.

II. OF THE ONE YEAR COURSE:

AHRENS, HENRY J.,
AUBEL, JOHN,
BACH, CARL GUSTAV,
BIEMILLER, CHARLES T.,
BLOODSWORTH, HARRY,
BOYD, CLARENCE D.,
BUCK, JOSEPH A.,
CARROLL, JOSEPH K.,
CHESEBROUGH, GEO. H. P.,
COLE, HARRY V.,
DEEMS, GEORGE W.,
DOBSON, WILLIE L.,
DOEPLITZ, EDWARD,
DOUTY, WINTER DAVIS,
ECKEL, JOHN CHARLES,
FLAUNLACHER, LEWIS W.,
GRUNEBAUM, WILLIAM,
HERSH, WILLIAM MC.,
HERZBERG, HENRY,
HOFHEIMER, MORRIS Z.,
JOHNSON, GEORGE S.,
KRAUS, LEWIS,
LAMBRIGHT, EDWARD THOS.,
MACKALL, RICHARD J.,
MAYER, HARRY ELIAS,
MYERS, GEORGE F.,
MINIFIE, WILLIAM G.,
MORRISON, ARTHUR W.,
O'NEAL, CHARLES H.,
PFAFF, GEORGE,
SHERMAN, LEWIS F.,
SINDALL, GEORGE W.,
SMITH, WILLIARD P.,
TIEMEYER, CHARLES F.,
WINTER, NICHOLAS T.,
WITTGENSTEIN, MEYER.

The recipients of the Peabody Prizes were as follows:

OF THE FIRST GRADE—One Hundred Dollars Each.

WILLIAM S. LAMBRIGHT,
WILLIAM F. SMITH,
WILLIAM C. L. GORTON.

OF THE SECOND GRADE—Fifty Dollars Each.

T. FOLEY HISKY,
SAMSON M. BROWNOLD,
WILLIAM S. EICHELBERGER,
JOSEPH LOWENBACH.

REPORT

OF THE

Principal of Baltimore City College.

BALTIMORE CITY COLLEGE,

December 31, 1883.

To the Board of

Commissioners of Public Schools:

GENTLEMEN:

The forty-fifth annual report of the Baltimore City College, here presented, will, with the accompanying papers, give to its friends gratifying proofs of its continued prosperity and usefulness.

From the date of the last annual report to the close of the scholastic year, our exercises continued without any interruption.

On the 21st and 22d of June, immediately upon the termination of the Summer session, the annual examination for admission to the College was held; at

which time 384 applicants presented themselves, as follows: From Grammar Schools, 336; from English-German Schools, 29; Private Schools, 19.

On the evening of June 27th, at Ford's Grand Opera House, the exercises of the thirty-third commencement took place; on which occasion twenty young men, who had completed our five years' course of study, received, at the hands of Mayor Whyte, certificates of graduation, and thirty-six members of the one year class were presented with the certificates authorized by the Board for that purpose.

The order of exercises was as follows: Prayer by Rev. C. Herbert Richardson; Salutatory Address, "*Hand and Brain*," by Mr. Harry W. Price; Honorary Oration, "*Imagination in Science*," by Mr. Wm. S. Lambright; Valedictory Address by Mr. Wm. F. Smith; Address to the Graduating Class by Hon. Robert M. McLane; Distribution of Certificates; Distribution of Peabody Prizes by Dr. Uhler, of the Peabody Institute; Presentation by Mayor Whyte, on behalf of the "New Shakspere Society," of a copy of its publications to Mr. J. Edwin Cummins, of the graduating class, for attainments in that line of literature.

The musical exercises of the evening were under the direction of Prof. Thiede.

The performances of our young men were of a highly creditable character, and seemed to give general satisfaction to the large and brilliant audience who honored the occasion with their presence and appreciative attention.

Upon the assembling of the school in September, 312 of the number admitted by the Board reported; this number, added to 316 who returned after the summer vacation and three who re-entered, gave an enrollment of 631 students, and increase of 35 over that of the preceding year. Of the number enrolled, 42 are the sons of non-residents of the city, who come from points more or less remote, to avail themselves of the superior advantages of the school, at an annual cost of fifty dollars to each, in addition to the expense incurred by daily travel to and from the city.

The evidence thus given of the favorable opinion of the school entertained by others than those living within the city limits, is very gratifying.

In attempting to classify the newly admitted students in September, it became, at once, evident that an increase of our corps of instruction was necessary, and, accordingly, an additional instructor was appointed by the Board in the person of Mr. P. H. Friese, a graduate of the college of the class of 1872, and for six years an assistant in Male Grammar School No. 11. Since his appointment, Mr. Friese has been efficiently performing the duties of his position.

In my last report, I suggested the propriety of changing the rule relating to the age at which pupils should be allowed to enter the college.

I take occasion again to call attention to this matter, and respectfully, but earnestly recommend the adoption by the Board of a rule that will forbid the examination of any applicant for admission to the college who has not attained the age of 13 years.

The adoption and rigid enforcement of such a rule would, in my judgment, tend to the diminution of the number of our students who, year after year, fail to meet the requirements for promotion, and are, consequently, compelled to remain two or more years in the same class, much to their own mortification and that of their parents.

While it is true, that for all time to come, our course of study must be pre-eminently adapted to meet the wants of that large number of our students who, on leaving us, immediately enter upon the practical duties of life, it is but just that there should be recognition given to the wants of those who wish, in the shortest time possible, to fit themselves for entrance into some higher institution of learning.

To such as have indicated a wish in that direction, the privilege has been given by the committee to drop such subjects of our course as are not required for admission to said institutions, and to pursue those subjects only which are necessary for said admission. This action of the committee cannot fail to commend itself to the community as eminently wise, and indicative of a purpose to accommodate the college, as far as possible, to all classes of our citizens, and thus enlarge its sphere of usefulness.

I am glad to be able to announce here the consummation of our long cherished wish in regard to the extension of our play ground.

Early in the spring the work of tearing down the buildings in the rear of the College lot was executed, under the direction of Mr. John S. Hogg, the efficient Inspector of Buildings.

The grading and other necessary work was done during the Summer vacation, so that at the opening of the session in September, our eyes were greeted with the sight of enlarged accommodations for the enjoyment of our pupils, during the daily recess.

During the coming year the services of Mr. Hogg will again be required, in making such alterations in the internal arrangements of our building, as will result in giving necessary relief to those of our classes now uncomfortably crowded by reason of small rooms.

Having discharged my duty in making known the present condition and wants of the College, permit me in conclusion, to express the hope that its usefulness may continue to increase as the years go on, and that it may be "an enduring monument to generations yet unborn, of the enlightened benevolence and genuine patriotism of its founders and guardians."

To the faithfulness of my professional colleagues in their respective departments of instruction and duty, it gives me pleasure here to bear testimony.

To the Board, and especially to the Committee on the College, my thanks are here tendered for their co-operation in all measures looking to the advancement of the Institution.

Respectfully,

WM. ELLIOTT, JR.,
Principal.

Occupations of Parents of Boys Entering Baltimore City College.

SEPTEMBER, 1883.

Agents, Brokers, Conveyancers	13
Bakers	2
Bankers	1
Barbers	2
Butchers	3
Cattle Dealers	2
Clerks, Employees	61
Farmers, Gardeners	4
Laborers, Draymen	8
Lawyers	3
Letter Carriers	2
Manufacturers	11
Mariners	3
Mechanics, of all kinds	48
Merchants, of all grades	79
Ministers	5
No Business	14
Policemen	4
Physicians	10
Restaurant Keepers	5
Teachers	4
Widows	35

Curriculum of Baltimore City College

FIRST YEAR.

English Grammar and Analysis,
Arithmetic,
History of England,
Writing,
Physiology,
Latin, commenced,
Book-Keeping, commenced,
Algebra.

SECOND YEAR.

Composition,
English Grammar and Analysis,
History of Rome,
Book-Keeping, continued
Natural Philosophy,
Latin, continued,
German, commenced,
Geometry, completed,
Plane Trigonometry.

THIRD YEAR.

Rhetoric, Composition and Elocution,
History of English Literature,
Natural Philosophy (full course),
Latin, continued,
German, continued,
Greek, commenced (optional),
French, commenced,
Trigonometry and Applications.

FOURTH YEAR.

English Literature,
Mental Philosophy,
Moral Philosophy,
Constitution of the United States,
Chemistry,
Latin, continued,
Greek, continued,
French, continued,
German, continued,
Analytical Geometry,
Astronomy.

FIFTH YEAR.

Latin, continued,
Greek, continued,
Calculus,
English Literature, continued,
Logic,
Moral Philosophy,
French, continued,
German, continued,
Chemistry, continued,
Astronomy, continued,
Review of Mathematics.

ONE-YEAR COURSE.

English Grammar,
Commercial Arithmetic,
Book-Keeping and Business Correspondence,
History of the United States,
Physiology,
Drawing,
Physics.

Recitations of Baltimore City College,

88th and 89th Terms.

I. RECITATIONS HEARD EACH WEEK BY THE RESPECTIVE PROFESSORS.

PROF. ELLIOTT—Analytical Geometry of three dimensions, 4 times; Calculus, 3 times; Review of Mathematics, once; Preparation, once; Surveying, 4 times; Analytical Geometry, 4 times.....17

PROF. MILLES—Latin, 14 times; French, 10 times.....24

PROF. RADDATZ—German, 13 times; History, 2 times; Preparation, 2 times; Composition, 2 times.....25

PROF. CLARKE—Natural Philosophy, 15 times; Chemistry, 6 times; Physics, once; Preparation, 2 times.....24

PROF. WIGHT—English, 17 times; Rhetoric, 6 times; Composition once.....24

PROF. PREECE—Drawing, 20 times.....20

PROF. SOPER—Geometry, 10 times; Plane and Spherical Trigonometry, 8 times; Astronomy, 2 times; Preparation, 2 times; Review of Mathematics, 2 times.....24

PROF. HARTMAN—Greek, 12 times; Latin, 12 times; Preparation once.....25

PROF. HAMILTON—Geometry, 5 times; Algebra, 12 times; Composition, 2 times; Arithmetic, 5 times.....24

PROF. HANK—Latin, 15 times; History, 3 times; Composition, 4 times; Preparation, 3 times.....25

PROF. J. H. ELLIOTT—Book-keeping, 20 times; Writing, 4 times.24

MR. NORRIS—Latin, 5 times; Algebra, 8 times; Composition, 2 times; Arithmetic, 5 times; Preparation, 4 times.....24

MR. MORGAN—Latin, 10 times; Physiology, 14 times; Preparation, once.....25

MR. ROBINSON—Composition, 4 times; History, 10 times; English, 2 times; Physics, 8 times.....24

MR. FRIESE—English, 8 times; Arithmetic, 5 times; History, 2 times; Composition, 2 times; Preparation, 7 times.....24

Recitations of Baltimore City College,

88th and 89th Terms.

II. RECITATIONS MADE EACH WEEK BY THE RESPECTIVE CLASSES.

J Class—Greek, 4 times; Latin, 4 times; English, 2 times; French, 2 times; German, 2 times; Calculus, 3 times; Review of Mathematics, once; Astronomy, once; Chemistry, 3 times; Preparation, 3 times.....25

I Class—Greek, 4 times; Latin, 4 times; English, 2 times; German, 2 times; French, 2 times; Analytical Geometry, 4 times; Astronomy, once; Chemistry, 3 times; Preparation 3 times.....25

II¹ Class—Latin, 4 times: Greek, 4 times; Trigonometry, 4 times; French, 3 times; German, 2 times; Natural Philosophy, 3 times; Rhetoric, 3 times; Preparation, 2 times.....25

II² Class—Latin, 4 times; Trigonometry, 4 times; French, 3 times; German, 4 times; Natural Philosophy, 3 times; Rhetoric, 3 times; Review Mathematics, 2 times; Preparation, 2 times..25

G Class—Latin, 5 times; Geometry, 5 times; German, 3 times; History, once; Natural Philosophy, 3 times; English, 3 times; Drawing, 2 times; Book-keeping, once; Preparation, once; Composition, once.....25

F Class—Same as G.....25

E Class—Same as G.....25

D Class—Latin, 5 times; History, 2 times; Arithmetic, once; Composition, 2 times; Physiology, 2 times; Algebra, 4 times; Drawing, 2 times; Book-keeping, 2 times; Writing, once; English, 2 times; Preparation, 2 times.....25

C Class—Same as D.....25

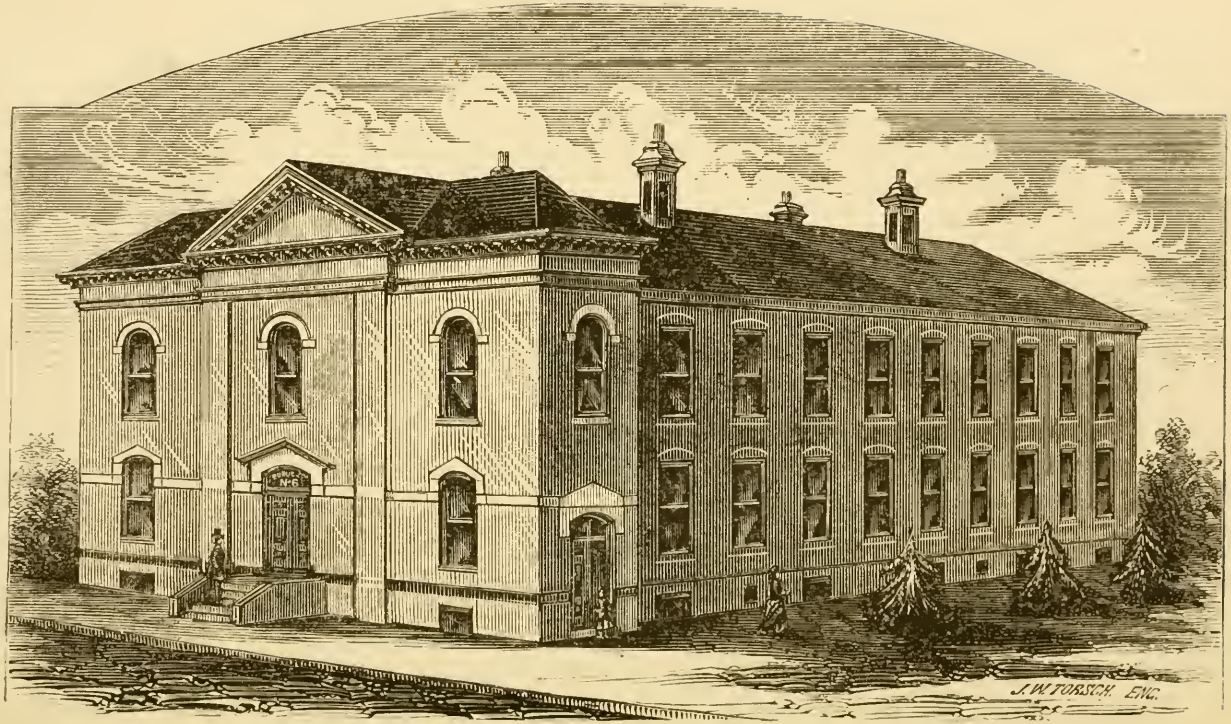
B¹ Class—Same as D.....25

B² Class—Same as D.....25

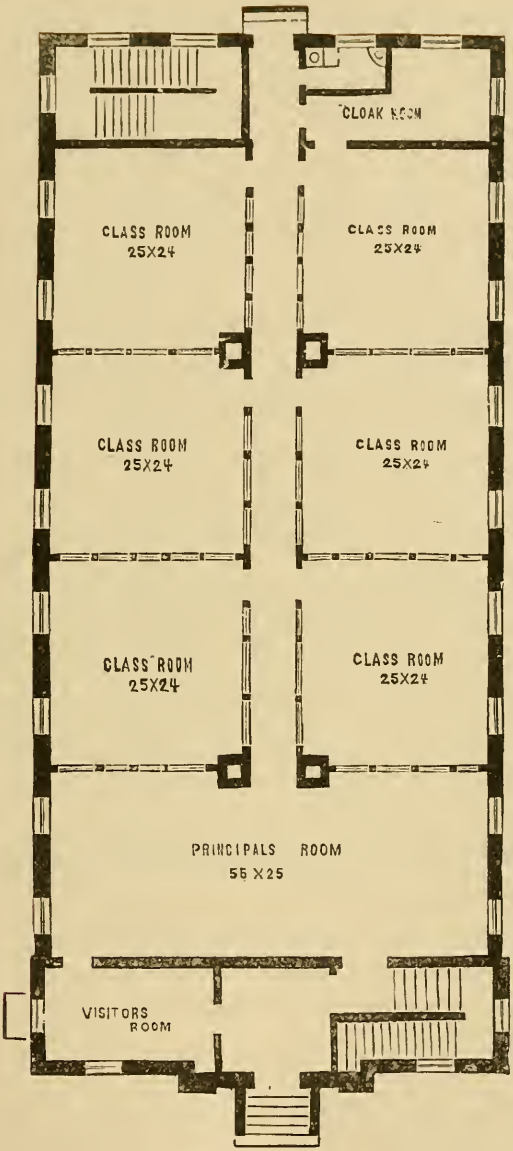
A¹ Class—Same as D.....25

A² Class—1st Div.—Arithmetic, 5 times; Physics, 4 times; English, 2 times; Composition, 2 times; Physiology, 2 times; Drawing, 2 times; Book-keeping, 4 times; Writing, once; History, 2 times; Preparation, once.....25

A² Class—2d Div.—Same as A² Class, 1st Div.....25



Male and Female Grammar School No. 6, Division Street, near Lanvale.



Ground Plan of No. 6.

REPORT OF THE PRINCIPAL

— OF THE —

EASTERN FEMALE HIGH SCHOOL

WITH ACCOMPANYING PAPERS,

For the Year 1883.

Committee on the Female High Schools.

JOHN P. POE.

WILLIAM C. ATKINSON.

HENRY B. ROEMER.

WILLIAM M. IVES.

BENJAMIN PRICE.

GEORGE H. BUDEKE.

JOHN T. MORRIS, *ex-officio.*

HENRY A. WISE, Sup't.

Faculty of the Eastern Female High School.

WILLIAM F. WARDENBURG,
Astronomy, Mental Philosophy, Algebra, Arithmetic, Book Keeping.

ELIZABETH A. BAER,
Rhetoric, Elocution, Composition.

PHEBE J. TOMPKINS,
Arithmetic, Composition.

SARAH L. BASSFORD,
History, Composition.

MARY C. GEDDES,
Algebra, Geometry, Composition, Etymology.

LAURA V. DE VALIN,
Physiology, English Literature, Composition.

ELIZA E. NICOLAI,
Natural Philosophy, Composition, Algebra.

VIRGINIA WENTZ,
Grammar, Composition, Literature.

MATILDA MULLIN,
Drawing.

ARMANDE DUBREUIL,
French.

WILLIAM A. TARBUTTON,
Vocal Music.

GRADUATES.

Bar, Rebecca,
Baumgarten, Fannie,
Beckwith, Fannie,
Black, Fannie,
Boswell, Lucie S.,
Du Vall, Anna,
Eckel, Jennie,
Evans, Ella A.,
Evans, Nellie F.,
Eversfield, Eugenia F.,
Feddeman, Anna L.,
Fish, Ridie L.,
Frisch, Amelia,
Gill, Julia,
Graham, Agnes,
Guyton, Anna M.,
Guyton, Kate L.,
Hall, Iola W.,
Hamburger, Bertha,
Hopkins, Fannie R.,
Kinnersley, Vivienia G.,
Knotts, Mollie L,
Lang, Minnie A.,
Langan, Cecilia T.,
McCleary, Maggie,
Mengel, Annie E.,
Mueller, Louise H.,
New, Carrie,
Rossiter, Fannie A.,
Swearer, Elizabeth,
Sheehan, Josie F.,
Stein, Clara V.,
Tucker, Bertha W.,
Wolf, Jennie,
Wyatt, Florence,
Young, Janie R.,
Young, Mary G.

Recipients of Peabody Medals.

FIRST GRADE.

Miss ANNA L. FEDDEMAN,
" MINNIE AVERILL LANG,
Miss LOUISE H. MUELLER,
" NELLIE F. EVANS.
Miss EUGENIA F. EVERSFIELD,

SECOND GRADE.

Miss CARRIE NEW,
" BERTHA W. TUCKER,
" BERTHA HAMBURGER,
" ANNIE E. MENGEL,
" AMELIA FRISCH,
Miss FANNIE A. ROSSITER,
" FLORENCE WYATT,
" FANNIE BAUMGARTEN.
" JOSIE F. SHEEHAN,
" FANNIE BLACK.

ADDITIONAL NUMBER RECEIVING TICKETS TO LECTURES

— AT —

PEABODY INSTITUTE.

Miss MARY G. YOUNG,
" JANIE RICKETTS YOUNG
" CECILIA T. LANGAN,
" JENNIE ECKEL,
" MAGGIE McCLEARY,
Miss REBECCA BAR,
" VIVIENIA KINNERSLEY.
" ANNA DU VALL,
" RIDIE L. FISH,
" LUCIE S. BOSWELL.

REPORT

OF THE

Principal of Eastern Female High School.

BALTIMORE, December 31, 1883.

To the Commissioners of Public Schools:

GENTLEMEN—In compliance with a rule of the Board, I respectfully submit the following as the report of the Eastern Female High School for the year 1883:

STATISTICS.

Pupils on roll, July 3, 1883		312
Pupils withdrawn, Sept. 1, 1883,	Graduates, 37. From other grades, 47.	84
Total enrollment, Sept. 1, 1883		395
Pupils withdrawn since Sept. 1. 1883		21
Number on roll, December 31, 1883		374
Percentage of attendance		91

The increase in the number attending the High Schools must be gratifying to all friends of popular

education. Upon the intelligence of its citizens depend the welfare and force of every commonwealth. Those who limit their education to the grammar school course, have but little opportunity of becoming acquainted with subjects that mature judgment and correct narrow and one-sided views; for the grammar school work, valuable as it is, must necessarily be elementary. The High School does not pretend to make scholars of its pupils; it aims only to begin the work of true education by sending into the community students—women who recognize that only by hard study and experience can they fit themselves for the duties of life. The work of the school is done by recitation, thorough explanation by the teacher, and research on the part of the pupil. The object is to exercise the judgment and cultivate the memory. The subjects are used as a means for cultivating habits of self-reliance and independent thought.

Our course of study was slightly modified at the beginning of the present scholastic year. Etymology was added to the first year course and Book-keeping to the fourth. These, we believe, are beneficial changes. The vocabulary of the younger pupils is not extensive, and they have much difficulty in mastering text containing words, to them, meaningless. This exercise will, at least, in a measure, remedy the defect and also help the work of composition. Book-keeping is useful; it improves the penmanship and gives knowledge of business forms, practical arithmetic, and the current methods of keeping accounts. It is specially valuable to those who desire to obtain positions in stores.

Much has been said of the "home study" of our pupils, and it has been charged that the work given is excessive, and, therefore, detrimental to health. This is a matter for serious consideration. Methods of education should be so adjusted as to conduce to the happiness as well as to the mental development of the pupil. The work exacted should never be sufficient to deprive even the average pupil of the time needful for recreation and enjoyment. Too much stress is laid upon the medals and the class standing. The trouble is largely due to injudicious parents, who urge their children to unreasonable exertion.

Formation of character is as much the function of the school-room as development of intellect. Upon the moral culture of the pupil everything depends. The boy or girl who has learned the great lesson of self-control, and who acts from pure motives, will successfully encounter the responsibilities of life. Accordingly every effort is made to instill principles that lead to right action and lady-like deportment. We are happy to say that violations of discipline are few, and that the demerit is seldom incurred for special offenses.

The Board has kindly supplied the necessary historical text-books, and given the department of physics sufficient apparatus to illustrate many of the principles taught. We yet need a Library of Reference and books for the department of elocution. We trust that both of these wants will be supplied in the coming year.

The continued illness of Miss Laura Mullin, teacher of drawing, induced her to withdraw from the school

last September. While we deeply regret the loss of the services of a teacher so able, we are confident that the efficiency of the department will be ably sustained by her successor. Prof. William A. Tarbutton is yet too ill to be with us. The duties of his position are performed in a satisfactory manner by Miss Louisa Buschman.

Our commencement was held in Ford's Grand Opera House on Friday evening, June 29th. Diplomas were awarded to thirty-seven young ladies. The address delivered by the Hon. John L. Thomas was able, pleasing, and instructive.

In conclusion, I tender my thanks to my associates for the able manner in which they have severally discharged their duties; to the officers and members of the Board for their courtesy, and to the Committee on Female High Schools for the deep interest they take in the welfare of the school.

WILLIAM F. WARDENBURG.

SUMMARY

Of Examinations for Admission, 188-.

Grammar, Public and Private Schools.	Examined.	Admitted.
Female Grammar No. 2	27	27
" " " 3	10	10
" " " 5	17	17
" " " 7	12	12
" " " 9	18	18
" " " 11	22	21
" " " 13	40	39
" " " 17	19	19
" " " 20	32	30
Public School No. 3	6	6
" " " 4	4	4
Private Schools	1	0
Special Examination	3	3
	211	206

CLASS RECITATIONS.

RECITATIONS MADE EACH WEEK BY THE DIFFERENT CLASSES.

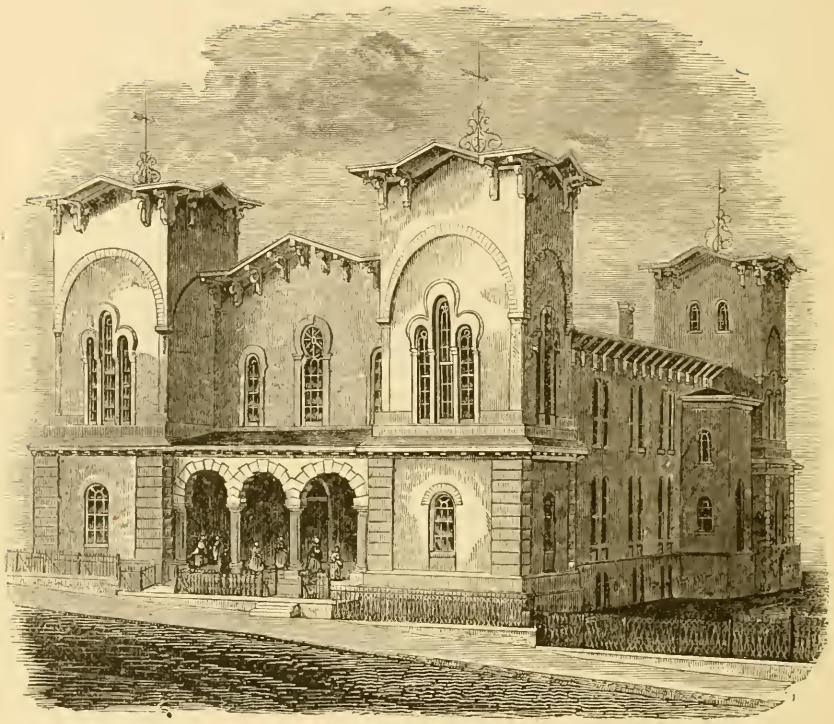
K AND L—Mental Philosophy, 3; Book-keeping, 2; History, 2; English Literature, 2; Grammar 1; Elocution, 2; Arithmetic, 2; Drawing, 2; French, 2; Music, 2; Composition, 2; Astronomy, 2.

H AND I—Natural Philosophy, 2; English Literature, 2; Rhetoric, 2; Elocution, 1; Algebra, 1; History, 2; Geometry, 3; Mensuration, 1; Drawing, 2; French, 2; Music, 2; Composition, 1; Arithmetic, 2.

E, F AND G—Rhetoric, 1; Literature, 2; Elocution, 1; Algebra, 3; Arithmetic, 2; Natural Philosophy, 2; Drawing, 2; French, 2; Music, 2; Composition, 2; History, 2; Physiology, 2.

A, B, C AND D—Physiology, 2; History, 3; Grammar, 2; Composition, 2; Arithmetic, 3; Algebra, 2; Drawing, 2; French, 1; Music, 2; Elocution, 1; Etymology, 1.

K AND L.....Fourth Year Classes.
H AND I.....Third " "
E, F AND G.....Second " "
A, B, C AND D.....First " "



Western Female High School.

REPORT OF THE PRINCIPAL

— OF THE —

WESTERN FEMALE HIGH SCHOOL

WITH ACCOMPANYING PAPERS,

For the Year 1883.

Committee on the Female High Schools.

JOHN P. POE.

WILLIAM C. ATKINSON.

HENRY B. ROEMER.

WILLIAM M. IVES.

BENJAMIN PRICE.

GEORGE H. BUDEKE.

JOHN T. MORRIS, *ex-officio.*

HENRY A. WISE, Sup't.

Faculty of the Western Female High School.

ANDREW S. KERR, PRINCIPAL,
Mental Philosophy, Astronomy, Natural Philosophy.

PAMELA A. HARTMAN,
English Literature, Rhetoric, History, Composition.

SARA S. RICE,
Elocution, Rhetoric, Grammar, Composition.

JANE S. WILLIAMS,
Algebra, Composition.

EMMA COWMAN,
Physiology, Rhetoric, History, Composition.

HENRIETTA C. ADAMS,
History, Literature, Composition.

LOUISA C. SAUMENIG,
Geometry, Algebra, Natural Philosophy, Book Keeping.

ANNA P. TUDOR,
Arithmetic, Composition.

LAURA D. BRIAN,
Grammar, History, Algebra, Natural Philosophy, Composition.

ANNIE O. SOLLERS,
Grammar, Etymology, History, Physiology, Composition.

MARY H. THOMIZ,
Arithmetic, Physiology, Grammar, Composition.

BESSIE G. THOMSON,
Algebra, Elocution, Drawing, Composition.

ELIZA J. DAVIS,
Drawing.

CHARLES L. COPINGER,
French.

WILLIAM A. TARBUTTON,
Vocal Music.

GRADUATES.

Alcock, Minnie R.,
Arnold, Grace S.,
Ashman, Carrie G.,
Baker, Clara C.,
Bennett, Maggie C.,
Bellermann, Annie E.,
Benson, Fannie Lee,
Bitting, Miriam,
Boone, Mary C.,
Brewer, Fannie,
Brooks, Carrie M.,
Cone, Claribel,
Dodge, Hattie A.,
Dodge, Mattie H.,
Forsyth, Susie A.,
Frink, Lulu,
Hammond, Alice G.,
Jones, Tillie Phillips,
Koehler, Frances L.,
Kriete, H. Florence,
Lambert, Florence,
League, Lelia E.,
Leopold, Rose,
McCausland, Leila A.,
MacLellan, Nannie L.,
Myers, E Lillian,
Oppenheimer, Martha,
Oursler, Carrie B.,
Owings, Mary,
Pattillo, Susie M.,
Pennington, Jennie,
Robinson, Eva Todd,
Rosewagg, Ida V.,
Sisson, Ridie L.,
Skinner, Mollie M.,
Stewart, Annie S.,
Stewart, Clara M.,
Sylvester E. Carlota,
Van Leer, Sophie,
Walker, Nannie R.,
Webster, Winnie R.,
Whittaker, Katie M.,
Wilson, Ella G.,
Yeakle, May.

Recipients of Peabody Medals.

FIRST GRADE.

Miss E. LILLIAN MYERS,
" ELLA G. WILSON,
Miss TILLIE PHILLIPS JONES,
" CLARABEL CONE.
Miss MINNIE R. ALCOCK.

SECOND GRADE.

Miss ROSE LEOPOLD,
" FRANCES L. KOEHLER,
" JENNIE PENNINGTON,
" H. FLORENCE KRIETE,
" EVA TODD ROBINSON,
Miss NANNIE R. WALKER,
" LELIA E. LEAGUE,
" MARY OWINGS,
" CARRIE G. ASHMAN,
" MIRIAM BITTING.

ADDITIONAL NUMBER RECEIVING TICKETS TO LECTURES

— AT —

PEABODY INSTITUTE.

Miss MAY YEAKLE,
" SOPHIE VAN LEER,
" MARY C. BOONE,
" MATTIE A. DODGE,
" CLARA M. STEWART,
Miss CARRIE B. OURSLER,
" FLORENCE LAMBERT,
" ALICE G. HAMMOND,
" GRACE S. ARNOLD,
" LULU FRINK.

REPORT

OF THE

Principal of Western Female High School.

BALTIMORE, December 31, 1883.

To the Commissioners of Public Schools:

GENTLEMEN—In submitting the following report of the Western Female High School for the year ending December 31st, 1883, it gives me great pleasure to state that the general condition of the school, notwithstanding the insufficient accommodations, has been satisfactory.

All that could reasonably be expected under the circumstances from a corps of teachers laboring earnestly and conscientiously, and exercising a firm but wise and gentle discipline, has been realized. As a rule, the progress of the pupils in their studies has been steady and sure; their attendance upon the sessions of the school punctual and regular; their obedience to their teachers prompt and cheerful, and their intercourse

with each other unusually free from the discord that too often attends a system in which competition for honors and prizes has a place.

The great difficulty with which the school has been contending for years is the want of room. I feel compelled again to advert to this with more emphasis than ever. A similar complaint was urged by my predecessor in his annual report for 1878, when the number of pupils was 141 less than now. The necessary increase in the number of classes, and the consequent appointment of two more teachers, make this want most keenly felt. It operates continually against the personal comfort of these teachers and the proper advancement of their classes. The fact is, the school has far outgrown the capacity of the building.

An attempt was made during the summer holidays to provide the requisite accommodations by dividing the music platform at the south end of the Study Hall into two apartments by a glass partition extending partly to the ceiling.

I am sorry to report that the attempt has failed; the classes occupying the two divisions might as well be in one room. The music platform as such, has been spoiled without the compensating gain of satisfactory class-rooms.

A need of long standing was, however, generously met during the present year by an appropriation of $350 to each of the High Schools for the purchase and repair of Philosophical Apparatus. The principals of these schools were authorized by their Committee to

make the necessary outlays, and did so with the strictest regard to economy and utility. Though the outfit in this respect is far from complete, the use of the new means of illustration and experiment has produced a marked degree of interest in the study of Physical Science.

At the regular examination in June there were present two hundred and eighty-four candidates, of whom four were from Private schools. Special examinations were granted during the months of September and October to twenty-two applicants from Private schools; the total result being that two hundred and seventy-eight Grammar school and nineteen Private school pupils were declared entitled to admission. Thirty-three of the former and six of the latter failed to enter. One was transferred to the Eastern Female High School.

The roll, therefore, as made up after organization in the fall, was as follows:

Returned after the summer vacation	344
Entered from the Grammar and English-German Schools	245
Entered from Private Schools	13
Transferred from the Eastern Female High School	7
Total	609

Miss Isabella Hampson, who had been a member of the Faculty since 1867, tendered her resignation to the Board on June 27th, 1883. Miss Hampson was a thorough teacher, and discharged her duties with com-

mendable fidelity and efficiency. Her late associates unite in wishing her much happiness in her new relation.

The position thus made vacant, was filled by the appointment of Miss Annie O. Sollers, formerly Principal of Female Primary School No. 19. At the same time, Miss Mary H. Thomiz, Principal of Female Grammar School No. 4, and Miss Bessie G. Thomson, First Assistant in Public School No. 5, were added to the Faculty. These ladies have all sustained, since their connection with this school, the reputation for earnestness and fidelity which justified their selection.

I mention with regret the continued indisposition of our old friend and associate, Prof. Wm. A. Tarbutton. He is now convalescent and hopes to resume his duties early in the year. His place in the department of music has been filled by Miss Louisa Buschman, who has proved to be an agreeable companion and competent substitute.

The commencement exercises were held on the night of June 29th, in Ford's Grand Opera House, in the presence of a large, intelligent and sympathetic audience.

Forty-four graduates received their diplomas from the hands of the Mayor, Hon. Wm. Pinkney Whyte, who also presented Shakesperean prizes to Misses Claribel Cone and Florence Kriete in a speech very happily conceived.

The eloquent address by the Hon. R. Stockett Mathews was heard with the most profound attention.

In conclusion, I desire more explicitly to express my indebtedness to my associates for their kind and valuable co-operation, and to tender my thanks to the members of the High School Committee for their constant encouragement and sympathy.

ANDREW S. KERR, *Principal.*

SUMMARY

Of Examinations for Admission, 1883.

Grammar, English German and Private Schools.	Examined.	Admitted.
Grammar No. 1	47	47
" " 4	13	13
" " 6	38	38
" " 8	30	28
" " 9	11	11
" " 10	14	14
" " 12	13	13
" " 15	36	36
" " 18	10	10
" " 19	32	32
" " 21	30	30
English-German No. 1	1	1
" " 2	2	2
" " 5	3	3
Private Schools	26	19
Total	306	297

CLASS RECITATIONS.

RECITATIONS MADE EACH WEEK BY THE DIFFERENT CLASSES.

M[1] AND M[2] CLASSES—Mental Philosophy, 3; Astronomy, 2; Bookkeeping, 2; Arithmetic, 2; English Literature, 2; History, 2; Composition, 2; Grammar, 1; Elocution, 2; Drawing, 2; French, 2; Music, 2; Preparation, 1.

L AND K CLASSES—Arithmetic, 1; Algebra, 2; Geometry, 4; Natural Philosophy, 2; Literature, 2; Rhetoric, 2; History, 2; Composition, 1; Elocution, 1; Drawing, 2; French, 2; Music, 2; Preparation, 2.

I, H, G[1] AND G[2] CLASSES—Algebra, 3; Arithmetic, 2; Natural Philosophy, 2; Physiology, 2; History, 2; Literature, 2; Rhetoric, 1; Composition, 2; Elocution, 1; Drawing, 2; French, 2; Music, 2; Preparation, 2.

F, E, D, C, B, A CLASSES—History, 3; Physiology, 2; Grammar, 2; Composition, 2; Algebra, 3; Arithmetic, 3; Elocution, 1; Drawing, 2; French, 1; Etymology, 1; Music, 2; Preparation, 3.

M[1] AND M[2].....Fourth Year.
L AND K.....Third "
I, H, G[1] AND G[2].....Second "
F, E, D, C, B, A.....First "

COURSE OF STUDY

— IN THE —

FEMALE HIGH SCHOOLS.

FIRST YEAR.

English Grammar,
Elocution,
History,
French,
Physiology,
Etymology,
Vocal Music,
Arithmetic,
Algebra,
Composition,
Drawing.

SECOND YEAR.

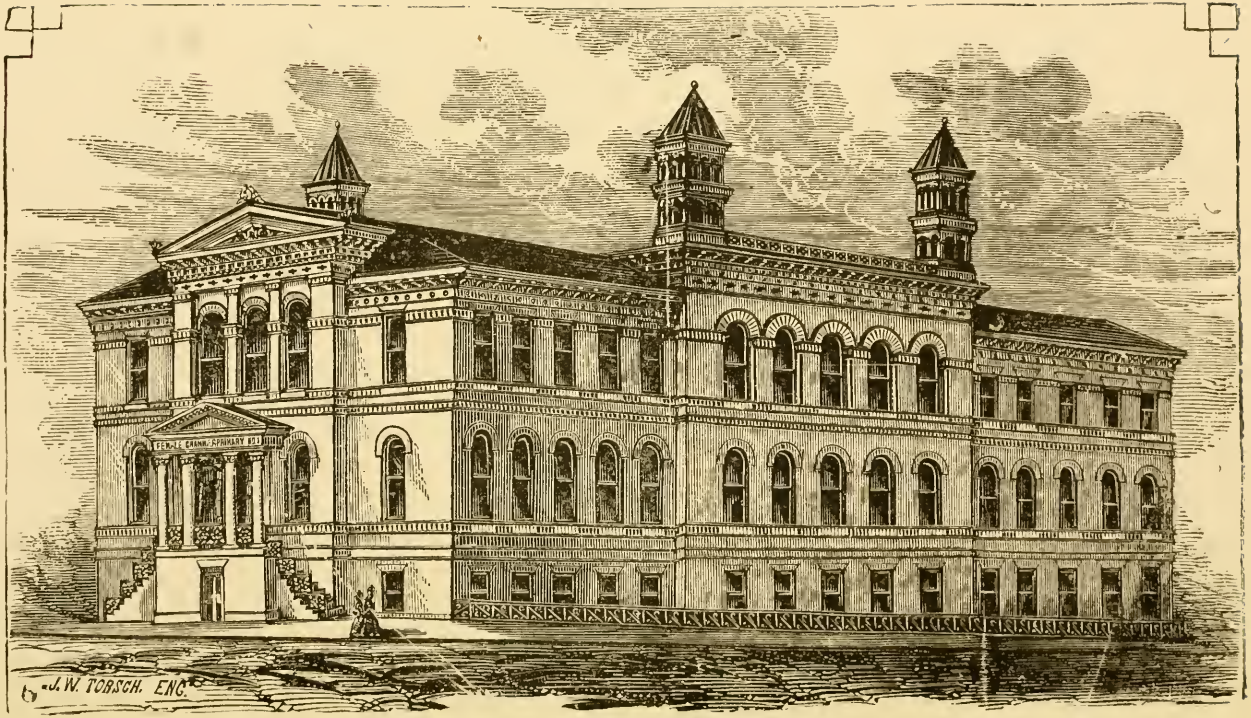
English Literature,
History,
Rhetoric,
Elocution,
Arithmetic,
Algebra,
Natural Philosophy,
Physiology,
Drawing,
Vocal Music,
Composition,
French.

THIRD YEAR.

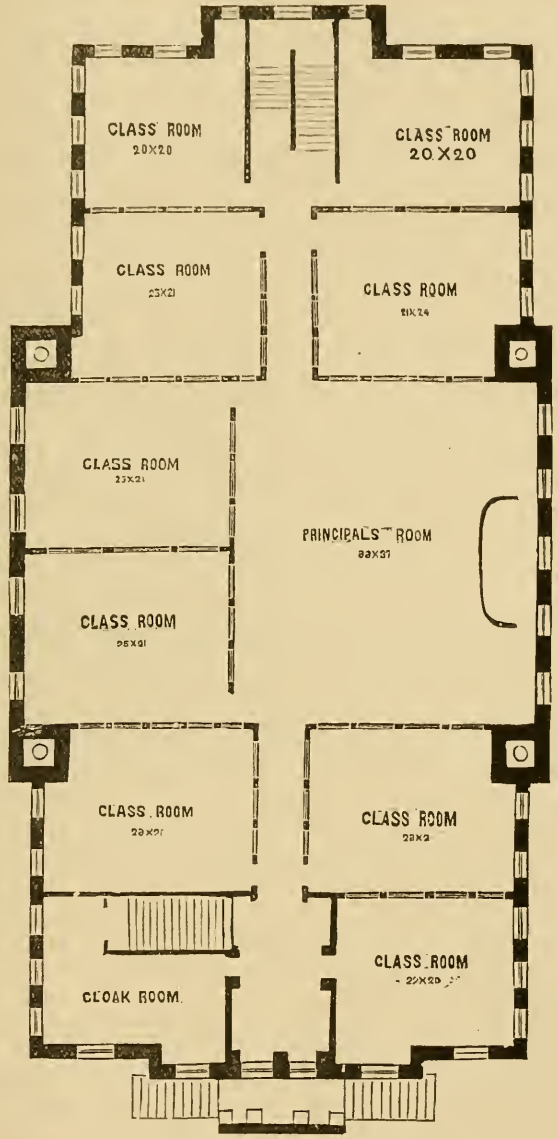
English Literature,
History,
Rhetoric,
Elocution,
French,
Algebra,
Geometry,
Natural Philosophy,
Composition,
Drawing,
Vocal Music.

FOURTH YEAR.

Grammar,
Arithmetic,
Mental Philosophy,
Book-Keeping,
Astronomy,
English Literature,
Composition,
Elocution,
French,
Drawing,
Vocal Music,
History of the United States.



Female Primary and Grammar School No. 1, S. W. Corner Fayette and Greene Streets.



Ground Plan of No. 1.

GRADES

FOR THE

DIFFERENT SCHOOLS.

GRADES FOR PRIMARY SCHOOLS.

Adopted February, 1883.

SIXTH GRADE.

Alphabet from black-board or chart.

Spelling " " "

Reading " " of short sentences.

Counting to one hundred by ones, twos and threes.

Write numbers and call them at sight as far as 100.

VOCAL MUSIC.—Scale with simple songs.

DRAWING.—Elements and principles of small letters.

Talks about objects.

Systematic correction of common faults in the use of language to be commenced in this, and continued through all the grades.

FIFTH GRADE.

READING AND SPELLING.--First half of First Reader. Pupils to be prepared to read in *any* First Reader. Two reading lessons a day. Oral Spelling.

ARITHMETIC.—Numbers of three figures to be read at sight; also written on slates from dictation. Addition.—Columns of two figures, seven lines, embracing the figures one to six inclusive.

PENMANSHIP.—Thirteen small letters. Copy from the board words formed from them.

VOCAL MUSIC.—As prescribed for the grade.

DRAWING.—As prescribed for the grade.

Talks about objects and the pictures in the Reader, the children being encouraged to express what they see in correct language.

FOURTH GRADE.

READING AND SPELLING.—Second half of First Reader. Pupils to be prepared to read in *any* First Reader. Two reading lessons a day. Oral drills in spelling the names of common objects.

ARITHMETIC.—Oral drills in rapid combination of numbers, especially addition. Read and write numbers containing four figures. Addition.—Columns of eight lines. Subtraction.—Minuend not to contain more than four figures.

PENMANSHIP.—Teach the Script Alphabet. Copy from the board words and short, simple sentences.

VOCAL MUSIC.—As prescribed for the grade.

DRAWING.—As prescribed for the grade.

Talks about objects and the pictures in the Reader, the children being encouraged to express what they see in correct language.

THIRD GRADE.

READING AND SPELLING.—First half of Second Reader. Pupils to be prepared to read in *any* Second Reader. Two reading lessons a day. Written and Oral Spelling. Practice the pupils, orally, on words in ordinary use.

ARITHMETIC.—Oral drills in rapid combination of numbers, especially Addition and Subtraction. Read and write numbers containing six figures. Addition.—Columns of ten lines. Subtraction, Multiplication by one figure. Multiplication table, 9x12, well taught. Very easy, practical examples.

PENMANSHIP.—Short sentences copied on single lines from board.

VOCAL MUSIC.—As prescribed for the grade.

DRAWING.—As prescribed for the grade.

Talks about objects, the pictures in the Reader, and about the subject-matter of the reading lessons, the pupils being encouraged to express their thoughts in correct language.

SECOND GRADE.

READING AND SPELLING.—Second half of Second Reader. Pupils to be prepared to read in *any* Second Reader. Two reading lessons a day. Written and Oral Spelling. Practice the pupils in the use of familiar words in sentences.

ARITHMETIC.—Oral drills in rapid combination of numbers. Easy, practical examples, involving Addition, Subtraction and Multiplication, taken separately. Read and write numbers containing seven figures. Addition.—Columns of twelve lines. Subtraction, Multiplication, Division, by 1 to 12 inclusive. (Short Division form). Multiplication table through 12x12.

PENMANSHIP.—Teach the system P. D. and S., Primary Course, using whatever number of book you find necessary.

VOCAL MUSIC.—As prescribed for the grade.

DRAWING.—As prescribed for the grade.

Talks about the pictures in the Reader, about objects, and about the subject-matter of the reading lessons. Faults in the use of language to be systematically corrected.

FIRST GRADE.

READING AND SPELLING.—First half of Third Reader. Pupils to be prepared to read in *any* Third Reader. Two reading lessons a day. Written and Oral Spelling. Practice the pupils in the use of familiar words in sentences.

ARITHMETIC.—Oral drills in rapid combination of numbers. Easy, practical examples involving the fundamental rules. Notation and Numeration of numbers containing ten figures. Addition.—Columns

of fifteen lines. Subtraction, Multiplication, Division. Divisor not to exceed five figures, and when it is twelve or less, use the Short Division form.

GEOGRAPHY.—Teach the natural divisions of land and water. Cardinal points of the compass. Names of the Hemispheres, Continents, Oceans and Grand Divisions. General idea of our own Country, State and City.

PENMANSHIP.—Teach the system P. D. and S., Primary Course, using whatever number of book you find necessary.

VOCAL MUSIC.—As prescribed for the grade.

DRAWING.—As prescribed for the grade.

Talks about the pictures in the Reader, about objects, and about the subject-matter of the reading lessons. Faults in the use of language to be systematically corrected.

GRADES FOR GRAMMAR SCHOOLS.

Adopted March, 1883.

SIXTH GRADE.

SPELLING.—Use the Third Reader—first half. Observe directions for composition.

READING.—*Newell's Third Reader. Read daily.* See that the pupils *understand* what they read, and practice them in reproducing the substance of the lesson in correct English. Endeavor to cultivate a pure English pronunciation, and to develop the faculty of expression. Illustrate the use and meaning of words by sentences. Observe the directions for composition.

ARITHMETIC.—Commence at Article 131, and go to Article 151, omitting Case IV. Teach the greatest common divisor and the least common multiple, as far as is necessary to enable the pupils to understand Case I and Case VI. Teach practical examples involving the rules which have been taught, and the tables of time, United States Money, and English Money. Use these tables occasionally in practical examples.

DEFINITIONS.—As far as Written Arithmetic.

MENTAL ARITHMETIC.—As far as Written Arithmetic. *Examination.*

GEOGRAPHY.—*Cornell's Primary.* Lessons 13, 14, 15, 16, 17, 18, 21, 22, 23, 24, 25, 26, 27, 28, 29. Teach the first lessons, and the descriptive geography as a reading lesson. Devote one of the drawing lessons, each week, to map-drawing. Draw the map of North America from memory.

GRAMMAR.—Teach the following parts of speech: Noun and adjective. Teach also, person, gender, and number. Make the sentence the basis of instruction in language. In parsing, pupils will only be required to recognize nouns and adjectives, and to tell the person, number, and gender of nouns. Observe the directions for composition.

PENMANSHIP.—The Principal will select a suitable number. *Teach carefully.*

DRAWING.—As prescribed for the grade. One lesson a week in map-drawing.

MUSIC.—As prescribed for the grade.

COMPOSITION.—Oral and written exercises in the use of language as the expression of thought. Letter-writing. The lessons at the beginning of the grammar, "the cautions," the exercises in false syntax, the rules of syntax, the analysis of sentences, punctuation and orthography, should be taught *practically* in connection with composition. Reading, spelling, grammar, and penmanship, are all involved in teaching this subject successfully. Composition will be carefully marked at examinations, in regard to penmanship, grammatical accuracy, neatness, punctuation, and spelling—especially the spelling of words in ordinary use, and such words as *there*, *their*, *here*, *hear*, etc. At the examination of this grade, a few simple words will be given as the basis of an exercise in sentence making. Every recitation should to some extent be made a lesson in language. One lesson a week.

FIFTH GRADE.

SPELLING.—To page 15, inclusive. Observe the directions for composition.

READING.—*Newell's Third Reader. Read daily.* See that the pupils *understand* what they read, and teach them to reproduce the substance of the lesson in correct English. Endeavor to cultivate a pure English pronunciation, and to develop the faculty of expression. Illustrate the use and meaning of words by sentences. Observe the directions for composition.

ARITHMETIC.—Commence at Article 151 and go to Article 158. Review the preceding grades, and exercise the pupils in solving prac-

tical examples. Teach the tables of Avoirdupois Weight, Dry Measure, Troy Weight, and the solution of simple practical questions in the Reduction of Denominate Numbers in Avoirdupois Weight. No examples in Denominate Numbers given at the examinations,

DEFINITIONS.—As far as Written Arithmetic.

MENTAL ARITHMETIC.—As far as Written Arithmetic. *Examination.*

GEOGRAPHY.—*Cornell's Primary.* Lessons 32, 33, 34, 35, 36, 37, 38, 42, 43, 44, 45, 46, 47. Review the *most general* questions of the preceding grade. Teach the descriptive Geography as a reading lesson. Devote one of the drawing lessons, each week, to map-drawing. Draw the map of South America from memory.

GRAMMAR.—Teach the following parts of speech: noun, adjective, article, pronoun, verb, adverb, conjunction and preposition. Teach the declension of nouns, the subject of a verb, and the distinction between the transitive and intransitive verb. Review the preceding grade. Only the simplest parsing required, strictly within the limits assigned. Use the sentence as the basis of instruction in language. Observe the directions for composition.

PENMANSHIP.—The Principal will select a suitable number. *Teach carefully.*

DRAWING.—As prescribed for the grade. One lesson a week in map-drawing.

MUSIC.—As prescribed for the grade.

COMPOSITION.—Oral and written exercises in the use of language as the expression of thought. Letter writing. The lessons at the beginning of the grammar, "the cautions," the exercises in false syntax, the rules of syntax, the analysis of sentences, punctuation and orthography, should be taught *practically* in connection with composition. Reading, spelling, grammar and penmanship are all involved in teaching this subject successfully. Composition will be carefully marked at examinations, in regard to penmanship, grammatical accuracy, neatness, punctuation and spelling—especially the spelling of words in ordinary use, and such words as *there*, *their*, *here*, *hear*, etc. Every recitation should be made to some extent a lesson in language. One lesson a week.

FOURTH GRADE.

SPELLING.—To page 30, inclusive. Observe directions for composition.

READING.—*Newell's Fourth Reader. Read daily.* See that the pupils *understand* what they read, and practice them in reproducing, in simple, correct English, the substance of the lesson. Endeavor to cultivate a pure English pronunciation, and to develop the faculty of expression. Illustrate the use and meaning of words by sentences. Observe the directions for composition.

ARITHMETIC.—Commence at Article 158 and finish Common Fractions. Teach factoring and cancellation with Case V in multiplication. Review the preceding grades, and solve practical examples. Teach the tables of Long Measure, Liquid Measure, Beer Measure, and the solution of simple examples in the Reduction of Denominate Numbers. No examples in Denominate Numbers given at the examinations.

DEFINITIONS.—As far as Written Arithmetic.

MENTAL ARITHMETIC.—As far as Written Arithmetic. *Examination.*

GEOGRAPHY.—*Cornell's Primary.* Lessons 94, 95, 100, 105, 106, 110, also, 93, 98, 99, 103, 104, omitting the rivers and cities in the last five lessons, except the *most important.* Bound the Eastern, Middle and Southern States. Review the *most important* questions of the preceding grades. Devote one of the drawing lessons, each week, to map-drawing. Draw maps of the Eastern, Middle, and Southern States from memory. Teach the descriptive geography as a reading lesson.

GRAMMAR.—*Harvey's Elementary.* Teach the parts of speech, transitive and intransitive verbs, the object of a transitive verb or preposition, the declension of nouns, the conjugation of verbs, in the indicative mode, active voice, and the formation of the plural by the general rule. Make the sentence the basis of instruction in language. Only simple parsing required, strictly within the limits assigned. From page 24 to page 74. Classes of participles, pages 41 and 42, adjective elements, pages 43 and 44, adverbial elements, pages 55 and 56, classes of sentences, pages 63 and 64, the absolute case, page 74, and the fine

print may be omitted. Review the preceding grades. Observe the directions for composition.

PENMANSHIP.—The Principal will select a suitable number. *Teach carefully.*

DRAWING.—As prescribed for the grade. One lesson a week in map-drawing.

MUSIC.—As prescribed for the grade.

COMPOSITION.—Oral and written exercises in the use of language as the expression of thought. Letter writing. The lessons at the beginning of the grammar, "the cautions," the exercises in false syntax, the rules of syntax, the analysis of sentences, punctuation, and orthography, should be taught *practically* in connection with composition. Reading, spelling, grammar, and penmanship, are all involved in teaching this subject successfully. Composition will be carefully marked at examinations, in regard to penmanship, grammatical accuracy, neatness, punctuation and spelling—especially the spelling of words in ordinary use, and such words as *there*, *their*, *here*, *hear*, etc. Every recitation should be made to some extent a lesson in language. One lesson a week.

THIRD GRADE.

SPELLING.—To page 45, inclusive. Observe the directions for composition.

READING.—*Newell's Fourth Reader. Read daily.* See that the pupils *understand* what they read, and practice them in reproducing, in simple, correct English, the substance of the lesson. Endeavor to cultivate a pure English pronunciation, and to develop the faculty of expression. Illustrate the meaning and use of words by sentences. Observe the directions for composition.

ARITHMETIC.—From page 102, to Chapter XIII, omitting Circulating Decimals. Review the preceding grades. Exercise the pupils in solving practical examples. Teach the tables of Avoirdupois Weight, Square Measure, Cubic Measure, and the solution of simple examples in the Reduction of Denominate Numbers. No examples in denominate numbers given at the examinations.

DEFINITIONS.—As far as Written Arithmetic.

MENTAL ARITHMETIC.—As far as Written Arithmetic. *Examination.*

GEOGRAPHY.—*Cornell's Intermediate.* Questions on pages 6 and 22. Lessons 14, 20, 21, 27, 31, 36, 41, 46, 47. Bound the States and Territories. Teach the mathematical and descriptive geography as a reading lesson. Devote one of the drawing lessons, each week, to map-drawing. Draw the map of the United States from memory.

GRAMMAR.—*Harvey's Elementary.* Review the preceding grades. From page 74 to page 112. Omit notes in fine print. Exercises in false Syntax not required as an examination subject. No questions or parsing involving the use of the subjunctive mode required. Make the sentence the basis of instruction in language. Only simple parsing, strictly within the limits assigned, will be required. Observe the directions for composition.

PENMANSHIP.—The Principal will select a suitable number. *Teach carefully.*

DRAWING.—As prescribed for the grade. One lesson a week in map-drawing.

MUSIC.—As prescribed for the grade.

COMPOSITION.—Oral and written exercises in the use of language as the expression of thought. Letter writing. The lessons at the beginning of the grammar, "the cautions," the exercises in false syntax, the rules of syntax, the analysis of sentences, punctuation, and orthography, should be taught *practically* in connection with composition. Reading, spelling, grammar and penmanship are all involved in teaching this subject successfully. Composition will be carefully marked at examinations, in regard to penmanship, grammatical accuracy, neatness, punctuation and spelling—especially the spelling of words in ordinary use, and such words as *there*, *their*, *here*, *hear*, etc. Every recitation should be made to some extent a lesson in language. One lesson a week.

SECOND GRADE.

SPELLING.—To page 60, inclusive. Observe the directions for composition.

READING.—*Newell's Fifth Reader* and *Dulany's History of Maryland.* Read selections from the Reader three times a week, and selections from the History twice a week. See that the pupils *understand* what they read. Endeavor to cultivate a pure English pronunciation, and to develop the faculty of expression. Practice the pupils in reproducing the substance of the lesson in correct English. Illustrate the use and meaning of words by sentences. Observe the directions for composition.

ARITHMETIC.—From Chapter XIII to Article 307, omitting Longitude and Time. Review the preceding grades, and vary the exercises with practical examples involving the rules which have been taught.

DEFINITIONS.—As far as Written Arithmetic.

MENTAL ARITHMETIC.—As far as Written Arithmetic. *Examination*

GEOGRAPHY.—*Cornell's Intermediate.* Lessons 67, 76, 77, 78, 79, 80, 81, 82. Review the *most general* questions of the third grade. Teach the mathematical and descriptive geography as a reading lesson. Devote one of the drawing lessons, each week, to map-drawing. Draw the map of Europe from memory.

GRAMMAR.—*Harvey's Elementary.* From the Noun, page 25, to the Rules of Syntax. Prepare large and small print. List of prepositions, conjunctions, and adverbs, need not be committed to memory. The analysis of sentences, pages 128-135, and the exercises in false syntax, not required as examination subjects. Make the sentence the basis of instruction in language. Observe directions for composition.

ALGEBRA.—To page 43, section 80.

ALGEBRA DEFINITIONS.—To page 46, section 80.

PENMANSHIP.—The Principal will select a suitable number. *Teach carefully.*

DRAWING.—As prescribed for the grade. One lesson a week in map-drawing.

MUSIC.—As prescribed for the grade.

COMPOSITION.—Oral and written exercises in the use of language as the expression of thought. Letter writing. Business letters. The lessons at the beginning of the grammar, "the cautions," the exercises in false syntax, the rules of syntax, the analysis of sentences, punctuation and orthography should be taught *practically* in connection with composition. Reading, spelling, grammar and penmanship are all involved in teaching the subject successfully. Composition will be carefully marked at examinations in regard to penmanship, grammatical accuracy, neatness, punctuation and spelling—especially the spelling of words in ordinary use, and such words as *there*, *their*, *here*, *hear*, etc. Every recitation should be made to some extent a lesson in language. One lesson a week.

FIRST GRADE.

SPELLING.—To page 75, inclusive. Observe the directions for composition.

READING.—*Sixth Reader* twice, *U. S. History* once, and the *History of Maryland* twice a week. See that the pupils *understand* what they read, and practice them in reproducing the substance of the lesson in correct English. Endeavor to cultivate a pure English pronunciation, and to develop the faculty of expression. Illustrate the meaning and use of words by sentences. Observe directions for composition.

ARITHMETIC.—Teach the entire book. Questions for the examination will be selected from the preceding grades, and the following: Percentage, Profit and Loss, Simple Interest, Discount, Bank Discount, Commission, Insurance, Simple and Compound Proportion, Analysis and Square Root with applications. Give to the other subjects as much time as can be allowed to them in proportion to their importance.

DEFINITIONS.—As far as Written Arithmetic.

MENTAL ARITHMETIC.—As far as Written Arithmetic. *Examination.*

GEOGRAPHY.—*Cornell's Intermediate.* Lessons 83, 92, 93, 100, 109, 115, 122, 123, 124, 125, 1, 2, 3, 4, 5, 6, 7, 8, 9, and the Map of Maryland with questions. Review the *most general* questions of the 3d and 2d grades. Teach the descriptive geography as a reading lesson. Devote one of the drawing lessons, each week, to map-drawing. Draw from memory maps of Maryland and the British Isles.

GRAMMAR.—*Harvey's Elementary.* From page 22 to page 146. Pay particular attention to the structure of the language, to composition, and to exercises in false syntax.

ALGEBRA.—To page 134.

ALGEBRA DEFINITIONS.—To page 134.

PENMANSHIP.—Select a suitable number. *Teach carefully.*

DRAWING.—As prescribed for the grade. One lesson a week in map-drawing.

MUSIC.—As prescribed for the grade.

COMPOSITION.—Oral and written exercises in the use of language as the expression of thought. Letter writing. Business letters. The lessons at the beginning of the grammar, "the cautions," the exercises in false syntax, the rules of syntax, the analysis of sentences, punctuation, and orthography, should be taught *practically* in connection with composition. Reading, spelling, grammar and penmanship, are all involved in teaching this subject successfully. Composition will be carefully marked at examinations, in regard to penmanship, grammatical accuracy, neatness, punctuation and spelling—especially the spelling of words in ordinary use, and such words as *here*, *hear*, *there*, *their*, etc. Every recitation should be made to some extent a lesson in language. One lesson a week.

N. B.—SIZE OF CLASSES: No class shall consist of more than sixty pupils of one grade.

Grades for Female Grammar Schools.

The 6th, 5th, 4th and 3d grades, are the same as the Male Grammar Schools, and the 2d and 1st the same, with the following exceptions:

In the second grade omit Algebra. In Arithmetic, review the preceding grades, and teach from Reduction, page 129, to Article 304, page 182.

In the first grade omit Algebra. In Arithmetic review the preceding grades, teach sections 305, 306, and the following subjects: Percentage, Profit and Loss, Simple Interest, Bank Discount, Proportion and Analysis.

Grades in German for the Public Schools.

Adopted October 16th, 1883.

[NOTE.—The Grades in English correspond to those for the Primary and Grammar Schools.]

SIXTH PRIMARY GRADE.

READING AND ORAL SPELLING.—Kreis I, p. 1–6.

WRITING.—Copy script letters from the blackboard.

OBJECT LESSONS.—School utensils. Answers to be given in complete sentences.

COUNTING.—According to English grade.

FIFTH PRIMARY GRADE.

READING AND ORAL SPELLING.—Kreis I., p. 1–12.

WRITING.—Copy from the blackboard letters and words written in script. Pay strict attention to correctness and neatness.

OBJECT LESSONS.—School utensils.

COUNTING.—Count up to 100 by 1's, 2's and 3's (mental addition).

MEMORIZING.—No. 31, p. 72.

FOURTH PRIMARY GRADE.

READING AND ORAL SPELLING.—Kreis I., p. 13-36.

WRITING.—Write the alphabet. Copy from the blackboard words and short sentences written in script.

OBJECT LESSONS.—The child's home. Illustrate by the blackboard.

COUNTING.—Count to 100 by 2's, 3's, 4's and 5's (mental subtraction).

MEMORIZING.—Three pieces on p. 36.

THIRD PRIMARY GRADE.

READING AND SPELLING.—Kreis I., p. 39-60.

WRITING.—Copy from reading lessons, and write short sentences from dictation.

OBJECT LESSONS.—Human body, food, dress.

ARITHMETIC.—Review preceding grades, and add mental multiplication. Teach multiplication table according to English grade.

MEMORIZING.—Nos. 6—8—11—14—19.

SECOND PRIMARY GRADE.

READING AND SPELLING.—Kreis II., p. 1-31.

TRANSLATION.—Exercises under IV., p. 1-11.

DICTATION.—Select sentences from reading lessons.

MEMORIZING.—Nos. 2—3—6.

OBJECT LESSONS.—Domestic animals.

WRITING.—Dwell upon shading in this grade.

ARITHMETIC.—Complete multiplication table, and give practical examples involving the same.

FIRST PRIMARY GRADE.

READING AND SPELLING.—Kreis II., p. 33-64.

TRANSLATION.—Exercises under IV., p. 11-22.

DICTATION.—Sentences taken from the reading lessons.

MEMORIZING.—Nos. 67 and 75.

OBJECT LESSONS.—City, country, and trades.

PENMANSHIP.—First half of No. 2.

ARITHMETIC.—Mental exercises in easy practical examples, involving the four fundamental rules.

SIXTH GRAMMAR GRADE.

READING AND SPELLING.—Klemm's Kreis III., p. 1—43 (inclusive).

TRANSLATION.—Exercises under IV., p. 1—16 (inclusive); also Nos. 21 and 38.

GRAMMAR.—The five declensions of nouns with articles.

DICTATION.—Dictate from reading lessons.

COMPOSITION.—Oral and written sentence-making.

PENMANSHIP.—Second half of No. 2.

FIFTH GRAMMAR GRADE.

READING AND SPELLING.—Klemm's Kreis III., p. 45—88 (inclusive).

TRANSLATION.—Exercises under IV., p. 17—30 (inclusive); also Nos. 67 and 82.

GRAMMAR.—Comparison of the adjective; declension of the adjective preceded by the article, the demonstrative, the possessive.

COMPOSITION.—Compose sentences.

PENMANSHIP.—First half of No. 3.

FOURTH GRAMMAR GRADE.

READING AND SPELLING.—Klemm's Kreis IV., p. 1—60 (inclusive).

TRANSLATION.—Exercises under IV., p. 1—21 (inclusive).

GRAMMAR.—Teach all the declensions of adjectives, declension of personal pronouns, conjugation of *sein*, *haben*, and *werden*, (indicative mode), and prepositions governing the dative.

COMPOSITION.—Once in two weeks.

PENMANSHIP.—Second half of No. 3.

Note.—Make the Geography for the grade in English a means of instruction in German.

THIRD GRAMMAR GRADE.

READING AND SPELLING.—Klemm's Kreis IV., p. 61—121 (inclusive).

TRANSLATION.—Exercises under IV., p. 21—41 (inclusive).

GRAMMAR.—Review the preceding grades. Teach declension and use of relative and interrogative pronouns, entire conjugation of the auxiliaries and regular verbs, prepositions governing the accusative and those governing the genitive.

COMPOSITION.—Once in two weeks.

PENMANSHIP.—First half of No. 4.

Note.—Make the Geography for the grade in English a means of instruction in German.

SECOND GRAMMAR GRADE.

READING AND SPELLING.—Selections from Klemm's Kreis V.

TRANSLATION.—Klemm's Kreis V., Part II. to p. 116 (inclusive); also 57 and 58, 60 and 61, 63 and 72.

GRAMMAR.—Review the preceding grades. Teach separable, inseparable, reflexive, impersonal and irregular verbs; also prepositions governing dative or accusative. Simple sentence.

COMPOSITION.—Once in two weeks.

PENMANSHIP.—Second half of No. 4.

Note.—Make the Geography for the grade in English a means of instruction in German.

FIRST GRAMMAR GRADE.

READING AND SPELLING.—Selections from Kreis VI.

TRANSLATION.—Second part of Kreis VI. to p. 135.

GRAMMAR.—Review the preceding grades. Complex and compound sentences.

COMPOSITION.—Once in two weeks.

LIST OF BOOKS AND STATIONERY

USED IN THE

PUBLIC SCHOOLS

OF

BALTIMORE CITY.

LIST OF BOOKS.

FOR BALTIMORE CITY COLLEGE.

Goodwin's Greek Grammar.
Goodwin's Greek Reader.
White's First Lessons in Greek.
White's Latin-English and English-Latin Dictionary.
Xenophon's Anabasis (Kendrick).
Herodotus (Johnson's).
Allen's Euripides Media.
Boise's Homer's Iliad.
Liddell & Scott's Greek Lexicon (Abridged).
Chase & Stuart's Virgil.
Chase & Stuart's Horace.
Chase & Stuart's Cæsar.
Chase & Stuart's Sallust.
Chase & Stuart's Cicero's Orations.
Chase & Stuart's Livy.
Andrew's Ovid.
Gildersleeve's Latin Grammar.
Gildersleeve's Latin Reader.
Gildersleeve's Latin Primer.
Gildersleeve's Latin Exercise Book.
Tacitus (Tyler's).

Flemming & Tibbin's French Dictionary (Abridged).
Noel & Chapsal's French Literature.
De Fiva's Elementary French Reader.
Bolmer's French Verbs.
Olendorff's French Grammar (Value).
Voltaire's Charles XII, 12mo.
Adler's German Dictionary, 12mo (Abridged).
Adler's Progressive German Reader.
Whitney's German Grammar.
Otto's German Grammar.
Otto's Beginning German.
Iphigenia auf Tauris (by Gœthe).
Lessing's Minna von Barnhelm.
Schiller's William Tell.
Schiller's Prose.
Schiller's Neffe als Onkel.
Smith's History of Rome (small edition).
Smith's History of Greece.
Quackenbos's History of the United States.
Alden's Science of Government.
Collier's British Empire.
Shepherd's History of the English Language.
Quackenbos's Composition and Rhetoric.
Hepburn's Manual of Rhetoric.
Westlake's How to Write Letters.
Zacho's New American Speaker.
Newell's Sixth Reader.
Alexander's Moral Science.
Barker's Chemistry.
Elements of Physics. By A. P. Page.
Wentworth's Plane Geometry.
Loomis's Analytical Calculus.
Loomis's Analytical Geometry.

Olney's Geometry and Calculus.
Brooks's Higher Arithmetic.
Ray's Surveying and Navigation.
Ray's New Higher Algebra.
Whitney's Essentials of English Grammar.
Spencerian Copy Books.
Hutchison's Physiology.
Norton's Natural Philosophy.
Dana's Geology.
Lockyer's Astronomy.
Webster's High School Dictionary.
Crittendon's Book-Keeping and Blanks.
Walter Smith's System of Drawing.

FOR FEMALE HIGH SCHOOLS.

Spier's & Surrenne's French Pronouncing Dictionary (Abridged).
Keetel's French Series.
Fasquell's French Reader.
Fasquell's French Grammar (large).
Fasquell's French Grammar (small).
Pinney's French Reader.
Harvey's English Grammar.
Newell's Fifth and Sixth Readers.
Anderson's General History.
Anderson's History of United States.
Anderson's History of France.
Anderson's History of England.
Bain's Composition and Rhetoric.
Webb's Etymology.
Boyd's Thompson.
Boyd's Milton.

Alden's Ethics, or Science of Duty.
Upham's Mental Philosophy.
Shaw's Outlines of English Literature.
Westlake's Common School Literature.
Webster's High School Dictionary.
Norton's Natural Philosophy.
Rolfe and Gillet's Chemistry (small).
Hutchison's Physiology.
Brooks's Geometry and Trigonometry.
Quackenbos's Higher Arithmetic.
Quackenbos's Practical Arithmetic.
Ray's New Elementary Algebra.
Lockyer's Astronomy.
Cornell's Physical Geography.
Crittendon's Book-Keeping and Blanks.
Mason's Fourth Music Reader.
Walter Smith's System of Drawing.

FOR THE GRAMMAR SCHOOLS.

Mason's National Music Charts.
Mason's Second Music Reader.
Mason's Third Music Reader.
Ray's New Elementary Algebra (for M. G. Schools).
Quackenbos's Practical Arithmetic.
Quackenbos's Mental Arithmetic.
Lippincott's Gazetteer.
Webster's Unabridged Dictionary.
Webster's Common School Dictionary.
Dulany's History of Maryland.
Quackenbos's History of U. S.
Quackenbos's First Lessons in Composition.
Harvey's Language Lessons.

Harvey's Elementary Grammar.
Swinton's Language Lessons.
Swinton's Language Primer.
Cornell's Inter. Geography (Md. Edition).
Cornell's Primary Geography.
Bibles (12mo, sheep).
Douay Bibles (12mo, sheep).
P. D. & S's System of Penmanship.
Pelton's Outline Maps.
Walter Smith's System of Drawing.
Newell's Revised Third, Fourth, Fifth and Sixth Readers.
Creery's Grammar School Spelling Book.
Creery's Catechism of United States History.
Whitney & Knox's Elementary Lessons in English, Part I—Teachers' Edition.

GERMAN BOOKS FOR PUBLIC SCHOOLS.

P. D. & S's German Copy Books.
Klemm's German Series 1st to 7th, inclusive.

FOR PRIMARY SCHOOLS.

Walter Smith's System of Drawing.
Smart's Manual of Calisthenics.
Mason's First Music Reader.
Quackenbos's Primary Arithmetic.
P. D. & S's System of Penmanship.
Cornell's First Steps in Geography.
Cornell's Primary Geography.
Webster's Pictorial Dictionary (sheep).
Webster's Primary Dictionary.
Bibles and Testaments.

Bibles and Testaments (Douay).
A B C Cards (Fisher's).
Arithmetical Table Cards (Fisher's).
American Educational Readers Nos. 1, 2 and 3.
Creery's Primary School Speller.
The Gem Song Book.
Whitney & Knox's Elementary Lessons in English, Part I—Teachers' Edition.

List of Stationery, Etc.,

FOR ALL THE SCHOOLS.

Composition Books, 40 pages.
Plain Copy Books, 40 pages.
Le Bar's Slates, Round Corners—Wired, 6½x10, 7x11, 8x12.
Moore's Pencil-Holding Slates, Round Corners, 6x9, 7x11, 8x12.
Ink Wells, with or without covers.
Lead Pencils (Eagle, American and Dixon).
Diamond Rubbers, No. 60.
Standard Double-Wedge Rubbers, No. 505.
Blackboard Rubbers.
Mt. Holly Mills Cap Paper, 12 lbs.
Mt. Holly Mills Letter Paper, 10 lbs.
Mt. Holly Mills Note Paper, 6 lbs.
Huron Mills Cap Paper, 12 lbs.

Huron Mills Letter Paper, 10 lbs.
Huron Mills Note Paper, 6 lbs.
Envelopes—Buff and white, Letter size.
Envelopes—Buff and white, Large size.
German Slate Pencils.
Soapstone Slate Pencils, 6-inch, sharpened.
Steel Pens—Gillott's Genuine, No. 404; Academic, No. 3x3; University, No. 4x4; Esterbrook's, No. 333; Spencerian, No. 1.
Pen-Holders—Faber's Tapering, No. 57.
Chalk Crayons (Parmenter's).
Chalk Crayons (N. Y. Crayon Co's).
Treasury Mucilage.
Ink—Maynard & Noyes's, American Standard Ink Co.'s Fluid and Violet, Stafford's Universal Black, Duval's Black and Violet.
Principals' Gongs, B. & H., No. 2400.
Assistants' Gongs, B. & H., No. 2100.
Teachers' Barometer Inkstand, with Rack.
Registers and Roll Books.

STATUTES AND ORDINANCES

RELATING TO THE

PUBLIC SCHOOLS

OF

BALTIMORE CITY.

STATUTES.

1. The Mayor and City Council of the City of Baltimore shall have full power and authority to establish in said city a system of free public schools, under such ordinances, rules and regulations, as they may deem fit and proper to enact and prescribe; they may delegate supervisory powers and control to a Board of School Commissioners; may prescribe rules for building school-houses, and locating, establishing and closing schools, and may in general do every act that may be necessary or proper in the premises.

2. The Board of Commissioners of Public Schools of Baltimore City, or by whatever name the body may be known, that has supervisory powers and control over the public schools of Baltimore city, shall have power to examine, appoint and remove teachers, prescribe the qualifications, fix the salaries, subject to the approval of the Mayor and City Council, and select text-books for the schools of said city; provided such text-books shall contain nothing of a sectarian or partisan character. The Board of Commissioners of Public Schools of said city shall annually make a report to the State Board of Education, of the condition

of the schools under their charge, to include a statement of expenditures, the number of children taught, and such other statistical information as may be necessary to exhibit the operation of the schools.

3. The Mayor and City Council of Baltimore shall have power and authority to make all ordinances for the protection of the school-houses and property, and to punish any person who may disturb the sessions of said public schools.

4. And the said Mayor and City Council are hereby authorized and empowered to levy and collect upon the assessable property in said city, as other taxes are levied and collected, such amount of taxes as may be necessary to defray all the expenses incurred for educational purposes by said Mayor and City Council.

5. The Treasurer, on the warrant of the Comptroller, shall pay to the Mayor and City Council the proportion of the free school fund to which said city is entitled.

ORPHANS' COURT.

6. The Orphans' Court of said city shall order and direct the funds arising from intestates' estates that may be administered upon in said court, and which remain undistributed for want of legal representatives of the intestates to claim the same, to be paid to the Board of Commissioners of Public Schools.

7. The court shall not make such order until they shall be satisfied that the intestates left no legal rep-

resentatives living at the time of his or her death, and they shall cause the administrator of such intestates to give notice, by advertisement to be inserted for such periods of time and in newspapers published in such places as they may deem necessary, that upon default of the appearance of any legal representative of the intestate, by a certain day to be fixed by the court, and named in said advertisement, the estate of said intestate will be paid to the Commissioners of Public Schools.

8. They shall, upon passing an order directing such payment, require from the treasurer of the Board of Commissioners of Public Schools, or any other officer who may be appointed by the said Board of Commissioners, or the Mayor and City Council of said city, to receive such funds, a receipt and release to the administrator for the same.

9. The release shall contain an obligation that the said funds shall, by the Board of Commissioners of Public Schools, be applied to the use and support of the public schools of the city of Baltimore, and shall be recorded and preserved in said court as other records are.

10. If the estate of an intestate shall be paid to the Board of Commissioners of Public Schools under this law, and any legal representatives of the intestate of no remoter degrees among collaterals than brothers' or sisters' children shall at any time appear and prove him, her, or themselves to be such legal representatives, the Board of Commissioners of Public Schools who received such estate, or their successors, if the

same shall be in their hands or shall have been applied to the use of the public schools, shall restore the same to such legal representative or representatives out of the school fund under their direction.

11. Nothing contained in this law shall be construed to interfere with or affect the rights vested in the Charitable Marine Society of Baltimore.

[See ordinance relating to this subject approved September 22, 1883.]

ORDINANCES.

COMMISSIONERS OF PUBLIC SCHOOLS.

1. There shall be appointed by the two branches of the City Council, in convention assembled, at the times and in the manner prescribed in Sections 2 and 3 hereof, twenty persons, to be called Commissioners of Public Schools, one commissioner to be selected from each of the several wards of the city; and said commissioners shall continue in office for the terms as prescribed in sections 2 and 3 hereof; provided, that if any commissioner shall remove from the ward from which he was appointed before the expiration of his term of office, then his place in the board shall be declared vacant, and the board may declare vacant the place of any commissioner who shall absent himself from three successive stated meetings of the board, without showing satisfactory cause for his non-attendance, after having been duly notified of the same.

2. The Commissioners of Public Schools, who shall be appointed in the month of February, 1877, shall be appointed for one, two, three and four years, which several terms of service shall be determined by lot at

their first meeting and immediately after their organization by the election of a President and Secretary, as provided by sec. 5 hereof; the members severally appointed for the first, second, third and fourth wards shall draw lots for their term of service, which terms shall be one, two, three and four years respectively, as fixed by the lot then drawn; and the several members for each succeeding four wards, the wards being taken in numerical order, shall determine their terms of service in the same manner as aforesaid.

3. In the month of February, in each succeeding year, the First and Second Branches of the City Council, in convention assembled, shall elect school commissioners in place of those only whose term of office shall at that time expire; and the commissioners elected, as prescribed by this section, shall continue in office for four years.

4. The First and Second Branches of the City Council, in convention assembled, shall have power to expel a member of the Board of Commissioners of Public Schools, either for persistent neglect of duty or for conduct unbecoming a school commissioner. Should any vacancy occur in the board by removal, resignation, death or otherwise, the unexpired term shall be filled in the same manner as provided by the preceding sections hereof.

5. Said commissioners shall meet within ten days after their election, and at their first meeting they shall proceed to the election of president from their own board, to be chosen by a majority of the whole body; also, a person to act as secretary, who shall

serve for one year, unless sooner removed by the board, and who shall have charge of the rooms, books, papers and documents of the board, and shall perform such clerical duties as may be required of him by its members or committees; the board shall assign the duties to be performed by him, and shall fix his salary, subject to the approval of the two branches of the City Council. If a vacancy should occur in the office of secretary, from any cause whatever, it shall be the duty of the board to elect a person to fill said vacancy as soon as it can conveniently be done; and in all cases a majority of the commissioners shall constitute a quorum for the transaction of business.

6. Whenever a vacancy or vacancies shall occur in the Board of Commissioners of Public Schools during the session of the City Council, it shall be the duty of the president of the board to inform the Mayor of such vacancy or vacancies, who shall communicate the same to the First and Second Branches of the City Council, who shall proceed in convention, according to their respective rules, to fill said vacancy or vacancies. If a vacancy or vacancies shall occur during the recess of the City Council, by death, resignation or otherwise, it shall be the duty of the board to fill the same as soon as may be convenient; the person or persons so elected to serve until the next session of the City Council.

7. There shall be appointed by the board a suitable person to be the Superintendent of Public Instruction for the city of Baltimore, who shall be a resident of the city of Baltimore, of literary and scientific

acquirements, and of skill and experience in the art of teaching, and who shall serve for the term of four years, unless sooner removed by the board. It shall be the duty of the superintendent to devote his time and attention entirely to the general supervision of the public schools of the city, subject to such rules and regulations as the Board of School Commissioners may establish. It shall especially be the duty of the superintendent to visit every school under the charge of the Board of Commissioners of Public Schools as often as once in each quarterly session, or four times during the academic year; to examine into its respective studies, and to inquire into all matters relating to the government of the schools, such as its curriculum of studies, discipline and course of instruction pursued therein, the text-books that are used, the condition of the school houses, and to make a monthly report of the matters thus specified to the Board of Commissioners of Public Schools.

8. There shall be appointed by the said board a suitable person to be the Assistant Superintendent of Public Schools, who shall be a resident of the city of Baltimore, of skill and experience in the art of teaching, and whose term of office shall be concurrent with that of the superintendent.

9. It shall be the duty of such assistant superintendent of the public schools to aid the superintendent in the supervision of the public schools of the city; he shall visit the primary schools as often as his duties will permit, and make a report of such visits to the superintendent; he shall assist in the examination of

the quarterly reports of teachers, in the preparation of the questions for the semi-annual examination of the classes of the primary and grammar schools; and be subject to such rules and regulations as the Board of Commissioners of Public Schools may establish.

10. In order to advance the interests of the schools committed to his charge, the superintendent, in conjunction with a committee of three members of the school board, shall, in the forms prescribed by the board, examine into and ascertain the qualifications of applicants for the situation of teachers, and re-examine, if necessary, any of the teachers employed in the schools under the charge of the board; and in order further to promote the cause of sound education, and to elevate the character and qualifications of the teachers, the superintendent shall, by all the means in his power, counsel and advise with the teachers in relation to the duties, the proper classification of studies, the best methods of imparting instruction, and, in general, as to the proper discipline and management of the schools under their charge.

11. The salary of the superintendent shall be fixed by the Board of Commissioners of Public Schools, subject to the approval of the two branches of the City Council; and he shall make annually a report in writing to the Mayor and City Council of all the matters of interest or importance in connection with the schools; and shall also, when requested, furnish to the Board of Commissioners of Public Schools of the city, a written statement, showing the number of schools in the city, the number of pupils under in-

struction and the teachers employed therein, with such additional information in respect to the matter above specified as may be deemed advisable and necessary.

12. The salary of the assistant superintendent shall be fixed by the Board of Commissioners of Public Schools, subject to the approval of the Mayor and City Council.

13. The Register is authorized to receive, through the secretary of the board, all moneys from the teachers, and all other funds due the school board, and pay out of the funds standing in the treasury of the city to the credit of the public schools, any orders that are provided for in the levy for school purposes, after having been examined by the committee on accounts and passed by the board, signed by the president and countersigned by the secretary of the Board of Commissioners of Public Schools.

14. The said Board of Commissioners of Public Schools shall have charge of the public schools in operation in the city of Baltimore, and of all such as may be in operation during their continuance in office; and it shall be their duty to employ teachers and determine their salaries; to prescribe the courses of study and the books to be used; to make all such by-laws for their own government, and all such rules and regulations for the management of the schools as they may deem expedient, and to modify and repeal the same at their pleasure; provided, that such by-laws, rules and regulations so made or modified, be not inconsistent with the laws of the state, or the ordinances of the city. And it shall further be the duty of said board,

at such time as other city officers are required to report, to report to the Mayor and City Council a statement of its transactions, with an account of their receipts and expenditures during the year last passed, and their resources for the year then commenced.

15. The Commissioners of Public Schools shall have charge of all the buildings used for school purposes, and they are hereby authorized to make all necessary repairs in the school houses of the city; provided, the same shall not exceed the sum of three hundred dollars.

16. The said board is authorized and directed to rent out, except for political purposes, for such compensation as to them may seem just and reasonable, the main halls in the Eastern and Western Female High School buildings, for public purposes, at such times and under such regulations as to them may appear right and proper; provided, the same shall not be rented so as to interfere with or interrupt the regular exercises of the schools.

17. The revenue derived therefrom, as provided in the preceding section, shall be accounted for by the said board and paid over by them to the Register, who is directed to place the same to the credit of the public school fund.

18. The said board shall not employ in building, repairing or improving, or in furnishing stationery, or any other kind of supplies, any member of said board; nor shall any member of said board be interested, directly or indirectly, in any contract whatever for the use of the public schools.

19. The salaries of the superintendent, assistant superintendent and secretary of the board, and of the teachers and all other persons permanently employed by the Commissioners of Public Schools, shall be paid monthly, on the last day of each month, by the City Register; and he is hereby authorized, in case of any deficiency in the collection of the school fund, or in anticipation of the levy for the same, to advance, from time to time, to said fund, such sums as shall be required for the payment of said salaries at the time when they shall be due.

20. There shall be no charge for tuition in any of the public schools, but it shall be the duty of the commissioners to furnish all necessary books and stationery for the several schools, and in general whatever fuel or other supplies the schools may require—the same to be paid for from the public school fund; and each pupil shall pay, in advance, one dollar per quarter for the books used by them, which shall go to the school fund; provided, that nothing in this section shall be so construed as to prevent the board from furnishing the use of books to the children of parents in indigent circumstances; provided, further, that pupils may furnish their own books, if they so prefer.

21. The public schools of Baltimore are designed exclusively for the education of those pupils whose parents, or in the case of orphans, whose guardians are citizens of Baltimore, or residents of Baltimore with a *bona fide* intention to become citizens.

22. The Board of Commissioners of Public Schools are hereby directed, before admitting the children of

non-resident parents or guardians into the public schools of the city of Baltimore, to charge such parents or guardians the following amounts, to wit: For admission to the Baltimore City College, per capita, twelve dollars and fifty cents per quarter; for admission to the Female High Schools, per capita, eight dollars per quarter; for admission to Grammar Schools, per capita, four dollars per quarter; for admission to Primary Schools, per capita, three dollars per quarter; the said amount to be paid invariably in advance, and to be paid by the School Commissioners to the Register of the city for account of the school fund.

23. The Commissioners of Public Schools shall not admit any book or books into use in the public schools, or discontinue the use of the same after having been admitted, unless said admission or discontinuance be approved by a vote of a majority of the entire board in session assembled at a regular meeting of said board.

24. The said Commissioners of Public Schools are hereby authorized to receive all devises, bequests and donations which may be made for the benefit of said public schools, and all devises, bequests and donations received by said Commissioners, by virtue either of this section or of any Act or Acts of the General Assembly of Maryland, shall be paid over by them to the Register of the city, who shall place the same to the credit of the school fund; and if any condition or conditions be prescribed in any such devise, bequest or donation, the same shall be applied under the direction of said commissioners, with the sanction of the Mayor and City Council, agreeably to the intention of the testator or

donor; and if no condition be prescribed in any such devise, bequest or donation, it shall not be lawful for said commissioners to draw all or any part of the amount thereof out of the city treasury during the year in which it was received, unless the collections from the resources and levy of the school fund for said year should fall short of estimated expenditures forming the basis of said levy; or unless it shall have been already allowed in the estimated resources of the fund for said year, otherwise the same shall be included in the estimate of the ensuing year.

[See ordinance relating to this subject approved September 22, 1883.]

25. The Register of the city shall demand and receive, from time to time, from the Treasurer of Maryland, from the Orphans' Court of Baltimore City, from the Commissioners of Finance, and from the Collector of the city, all such sum or sums of money as may be in their hands for the support and benefit of the public schools of the city, and he shall place the same to the credit of the public school fund.

26. All assessments for paving or repaving in front of any of the public schools, or lots of ground attached thereto, and also all assessments of benefits for opening or widening any street or streets, so far as the public schools may be interested, shall be paid by the Register out of any unappropriated money in the treasury.

27. It shall not be lawful for said Board of Commissioners of Public Schools to exceed in their expenditures the amount annually appropriated therefor by the City Council; and it shall be their duty to apply

the same exclusively to the several purposes, and as far as practicable, in the proportion specified in the statement of estimated expenses, on which said City Council shall have based the school fund levy for the year.

28. The Male Public High School of Baltimore shall be styled the Baltimore City College; and whenever any of the pupils of said school shall have satisfactorily completed the prescribed term and course of instruction, the Commissioners of Public Schools shall have power to confer on them testimonials, in form as follows, viz.: This certificate is given to—— ——, a pupil of the Baltimore City College, in testimony that he has pursued and satisfactorily completed the studies of the——course of——years; and said testimonials shall be signed by the president of the board, by the Mayor of the city, with the seal of the city attached, by the committee on the Baltimore City College, and by the principal, vice-principal and professors of said college.

29. Said Commissioners of Public Schools are authorized to cause said testimonials to be engraved on copper, or lithographed, with a suitable vignette, the expenses necessarily connected with the preparation of said testimonials to be paid from the school fund; provided, that no commissioner or teacher shall ever charge or receive any fee or compensation for so signing said testimonials.

30. Said Commissioners of Public Schools shall have power to confer testimonials on pupils of the Eastern and Western Female High Schools, in conformity with

the requisitions and provisions of the preceding two sections.

31. Whenever any pupil shall leave any of the high schools without having completed the prescribed term and course of instruction, then, in such cases, said commissioners shall have power to confer such testimonials on said pupils as said commissioners may deem to be proper and appropriate to the occasion.

SCHOOLS FOR COLORED CHILDREN.

38. It is hereby made the duty of the Board of Commissioners of Public Schools of the city of Baltimore to organize separate schools for colored children, and to establish as many schools for the education of the colored children of Baltimore city as may, in the judgment of said board, be necessary.

39. The schools to be established in accordance with the provisions of this ordinance shall be subject to such rules and regulations as may be prescribed by the said board in its discretion.

40. All taxes paid by colored persons in the city of Baltimore for educational purposes, shall be placed to the credit of the schools for colored children in the accounts of the City Register.

LIBRARIES.

41. There shall be established at the Baltimore City College, and at each of the two Female High Schools, a library for their use, without charge, under such reg-

ulations as may be adopted by the Board of Commissioners of Public Schools.

42. The selection of the books, which shall be only of an instructive and moral character, shall be made by the said commissioners, or a committee appointed by them for the purpose, and no book deemed by them to be injurious to the morals of the pupils, or of a sectarian character, whether obtained by purchase or donation, shall be admitted in said libraries; and all books purchased under any future ordinance or resolution of the City Council or otherwise, for this purpose, shall be subject to the restrictions herein contained.

PEABODY PRIZES.

43. The Commissioners of Public Schools of the city of Baltimore are hereby authorized to accept and receive the premiums given by the Trustees of the Peabody Institute to the Baltimore City College and the Female High Schools, as specified in Mr. Peabody's letter to the Trustees; and to have the same distributed from time to time in such a manner as they shall deem most conducive to the benefit of the schools and the objects of the donor.*

*Mr. Peabody, in his first letter to his trustees, dated Baltimore, Feb. 12, 1857, as set forth in the Act of 1858, c. 209, incorporating the Peabody Institute, says: "I desire that the trustees, in order to encourage and reward merit, should adopt a regulation by which a number of the graduates of the public high schools of the city, not exceeding fifty of each sex in each year [who shall have obtained by their proficiency in their studies and their good behavior certificates of merit from the commissioners or superintending authorities of the schools to which they may be attached], may, by virtue of said certificates, be entitled as an honorary mark of distinction to free

STATUTE RELATING TO VACCINATION.

[City Code, 1879, Article 23.]

SECTION 26. No teacher in any school shall receive into such school, any person as a pupil, until such person shall produce the certificate of some regular practicing physician, that such applicant for admission into the school has been duly vaccinated. Any teacher so offending shall, on conviction thereof, forfeit and

---

admission to the lectures [at Peabody Institute] for one term or season after obtaining the certificates. I also desire, that for the same purpose of encouraging merit, the trustees shall make suitable provision for an annual grant of twelve hundred dollars; of which five hundred shall be distributed every year in money prizes, graduated according to merit, of sums of not less than fifty dollars nor more than one hundred for each prize, to be given to such graduates of the public Male High School now existing or which may hereafter be established, as shall in each year, upon examination and certificate of the school commissioners or other persons having the chief superintendence of the same, be adjudged most worthy from their fidelity to their studies, their attainments, their moral deportment, their personal habits of cleanliness, and propriety of manners; the sum of two hundred dollars to be appropriated to the purchase, in every year, of gold medals of two degrees, of which ten shall be of the value of ten dollars each, and twenty of the value of five dollars each, to be annually distributed to the most meritorious of the graduating classes of the public Female High Schools; these prizes to be adjudged for the same merit, and under the like regulations as the prizes to be given to the graduates of the Male High School; the remaining five hundred dollars to be in like manner distributed in money prizes, as provided above for the graduates of the Male High School in the same amounts respectively, to the yearly graduates in the School of Design attached to the Mechanics' Institute of this city. To render this annual distribution of prizes effective to the end I have in view, I desire that the trustees shall digest, propose and adopt all such rules and provisions, and procure such correspondent regulations on the part of the public institutions referred to, as they may deem necessary to accomplish the object."

pay a fine of ten dollars for each offense, and no Public School Trustee or Commissioner shall grant a permit to any child to enter any public school, without such certificate, under the same penalty.

AN ORDINANCE TO PREVENT THE SPREAD OF DISEASE.

[Approved February 21, 1880.]

SECTION 1. Be it enacted and ordained by the Mayor and City Council of Baltimore, That it shall be the duty of all physicians who may be in attendance in any family whose child or children may be attending any of the public schools of this city, which family may have a case or cases of scarlet fever, diphtheria, measles, small-pox, chicken-pox, whooping-cough, or any other contagious disease, to give a certificate of the same to the parents or parent of the child or children so diseased as soon as the disease is developed; and it shall be the duty of the parents or parent, as soon as the physician certifies that contagious disease exists in his, her or their house, to notify the principal of the school attended by his, her or their children, within twenty-four hours, and for a failure of parent or physician to comply with the provisions of this section, shall be fined ten dollars for every offense, said fine to be collected as other fines are collected.

SEC. 2. And be it further enacted and ordained, That if there be no physician attending in cases of disease mentioned in section 1 of this ordinance, it shall be the duty of the parents or parent to report the disease to the principal of the school attended by his, her or their child or children, within twenty-four hours from

the time the disease is known to be contagious; and any parent who fails to comply with the requirements of this section shall be fined ten dollars for every offense, said fine to be collected as other fines are collected.

Sec. 3. And be it further enacted and ordained, That if any parent or physician shall notify any public school teacher of the city that scarlet fever, diphtheria, measles, small-pox, chicken-pox, whooping-cough, or any other contagious disease, exists in any family whose child or children are attending any of the public schools of this city, then it shall be the duty of the principal of the school to exclude the child or children of said family from the school until the attending physician certifies that all danger from contagion has passed; the principal of any public school who fails to comply with the requirements of this section shall be fined ten dollars for every offense, said fine to be collected as other fines are collected.

Sec. 4. And be it further enacted and ordained, That if any teacher or teachers reside, board or lodge in any house where a child or children in such house is suffering with scarlet fever, diphtheria, measles, small-pox, chicken-pox, whooping-cough, or any other contagious disease, of which fact the said teacher has been cognizant, then it shall be the duty of said teacher to certify to the same to a member of the school board, and such teacher shall not perform his or her duties in any public school in this city until a physician attending such case or cases of contagious disease shall certify that all danger from contagion has passed; and for a

failure of any teacher to so notify the school board or so absent him or herself from his or her duties until all danger shall have passed, as certified by the attending physician, such teacher shall be fined ten dollars for every such offense, said fine to be collected as all other fines are collected.

SEC. 5. And be it further enacted and ordained, That all ordinances or parts of ordinances inconsistent with the provisions of this ordinance be and the same are hereby repealed.

INTESTATES' ESTATES.

An Ordinance to provide for the direct application to the use and support of the public schools, of all funds received by the City Register, arising from intestates' estates, which remain undistributed for want of legal representatives.

[Approved September 22, 1882.]

SECTION 1. Be it enacted and ordained by the Mayor and City Council of Baltimore, that all funds which, from and after the approval, or final passage of this ordinance, shall be paid to or received by the City Register, or in any other way or through any other person or persons, passed over and transferred to the Mayor and City Council of Baltimore, pursuant to the provisions of sections 6, 7, 8 and 9, of Article 43, of the Baltimore City Code, title "Schools," sub-title "Statutes," sub-division "Orphans' Court," and of section 25 of said Article, sub-title "Ordinances," sub-division "Commissioners of Public Schools," shall be held subject to the order of the Board of Commissioners of Public Schools

of the city of Baltimore, in like manner as the funds derived from taxation for said purposes are held, and such funds as may be thus received are hereby declared to be a separate and distinct revenue, to be applied to the use and support of the public schools, in addition to the annual tax levied, and the annual appropriation made for that purpose.

SEC. 2. And be it further enacted and ordained, that it shall be the duty of the City Register to notify and inform the Board of Commissioners of Public Schools, by a communication in writing, whenever any funds arising from the aforesaid source shall be hereafter received by him, and the amount of the same.

SEC. 3. And be it further enacted and ordained, that whenever said Commissioners of Public Schools shall intend to apply any portion or all of the aforesaid funds hereafter received from intestates' estates, the warrant or order drawn for said funds, or any portion thereof, shall show upon its face that it is drawn upon said funds, and it shall be the duty of the City Comptroller and the City Register to keep a separate account of all receipts and disbursements for said special and specific fund.

SEC. 4. And be it further enacted and ordained, that all ordinances or parts of ordinances, inconsistent with the provisions of this ordinance, be and the same are hereby, to the extent of such conflict and inconsistency, repealed.

MANUAL TRAINING SCHOOL.

An Ordinance to empower the Board of Commissioners of Public Schools of Baltimore City to establish a School for Manual Training.

[Approved October 20, 1883.]

SECTION 1. Be it enacted and ordained by the Mayor and City Council of Baltimore, that the Board of Commissioners of Public Schools of Baltimore City be and they are hereby authorized and directed to establish in the city of Baltimore, in some convenient locality, as near the centre of the city as possible, a school for manual training, under such name or title as said Board shall select.

SEC. 2. And be it further enacted and ordained, that said school shall be open to the children of the citizens and *bona fide* residents of the city of Baltimore, and that the admission to said school shall be regulated by the law now existing for the admission of pupils to the public schools of the city of Baltimore, except in so far as changed by this ordinance.

SEC. 3. And be it further enacted and ordained, that the age and qualifications for admission to said school shall be fixed and prescribed by said school board; provided, that the fee for the use of tools and materials for pupils, who are the children of residents or citizens of Baltimore, shall not exceed one dollar each per scholastic quarter.

SEC. 4. And be it further enacted and ordained, that pupils from other places may be admitted to said school

upon such terms and conditions and upon payment of such fees as said board shall prescribe.

SEC. 5. And be it further enacted and ordained, that this ordinance shall take effect from the day of its passage.

INDEX.

Pages 1-40 are duplicated. In the first part of the book Roman characters are employed in numbering 1-40. In the second part numerals are used.

List of Commissioners and Committees iii

Report of the President of the Board vii
- School Statistics ix
- Financial xii
- School Buildings xix
- Industrial Education--Manual Training School xxiii
- Condition of the Schools xxxi

Report of the Committee on Accounts 5
- Tables showing Receipts and Expenditures .. 8
- Estimates for the year 1884 10
- Itemized Expenditures for each School, etc .. 12
- Locations of Buildings, Size, Value, etc 19
- Schedule of Salaries and Conditions 23

Report of the Superintendent 33
- Statistics of the Schools 35
- School Accommodations 40
- Discipline 47
- Opening Exercises 48
- Large Classes 49
- Teachers' Meetings 50
- Supplementary Reading 52
- Course of Study 53
- Educational Advantages of Baltimore 57
- High Schools 60
- Tables accompanying Report 63

REPORT OF THE ASSISTANT SUPERINTENDENT..... 79
Elementary Education..... 81
Modifications, etc., suggested..... 84

REPORT OF PRINCIPAL OF BALTIMORE CITY COLLEGE, AND ACCOMPANYING PAPERS..... 89

REPORT OF PRINCIPAL OF EASTERN FEMALE HIGH SCHOOL, AND ACCOMPANYING PAPERS..... 107

REPORT OF PRINCIPAL OF WESTERN FEMALE HIGH SCHOOL, AND ACCOMPANYING PAPERS..... 121

GRADES FOR PRIMARY SCHOOLS..... 141

GRADES FOR GRAMMAR SCHOOLS..... 145

GRADES IN GERMAN FOR PUBLIC SCHOOLS..... 155

LIST OF BOOKS AND STATIONERY..... 161

STATUTES AND ORDINANCES..... 171

UNIVERSITY OF MARYLAND LIBRARY

DO NOT CIRCULATE

267364

[redacted]

DO NOT CIRCULATE

UNIVERSITY OF MARYLAND LIBRARY